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Short Stature in Caucasian Males: Personality Correlates and Social Attribution

Leslie F. Martel
University of Rhode Island

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SHORT STATURE IN CAUCASIAN MALES:
PERSONALITY CORRELATES AND SOCIAL ATTRIBUTION

BY
LESLIE F. MARTEL

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
PSYCHOLOGY

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ABSTRACT

Given the advent of genetically engineered human growth hormone, there is a pressing need to better understand the personality correlates and impact of short stature in males. One hundred-twenty college-age Caucasian males of short, average and tall stature were administered measures of self-concept, body-cathexis, psychological security, and a semantic-differential measure. In addition, a questionnaire regarding the importance of height in daily life was also included.

The broadly-based literature review strongly suggests that short stature in males is a distinct developmental and social liability.

The results of the present study supported the first prediction that short subjects would feel significantly less positive about their bodies than their taller peers. The average-height and tall subjects did not differ significantly from each other regarding their overall feelings about their bodies.

The second prediction that short males would demonstrate a less favorable self-concept was substantially supported.

The third prediction that short males would demonstrate greater psychological insecurity was not supported.

The fourth prediction that short subjects would report more pronounced feelings regarding the impact of height in their daily lives was substantially supported.

The fifth prediction that the sample as a whole would attribute negatively valenced and less socially valued personality traits to men of short height was strongly supported. Implications of these findings are discussed.

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IN MEMORIAM

This dissertation is dedicated to the memory of my Father-in-Law, William T. Adis, whose struggle against cancer will always serve as my example of strength and courage in the face of overwhelming odds.

CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
IN MEMORIAM	iv
CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURES	x
LIST OF APPENDICES	xi

<u>Chapter</u>	<u>page</u>
I. INTRODUCTION AND REVIEW OF THE LITERATURE	1
Historical Perspective	1
The Current Status of the Research	2
Importance of Physical Appearances	4
The Relationship Between Physical Appearance and Personality	12
The Developmental Impact of Short Stature in Males	25
The Social Context	41
Short Stature In Males and Discrimination	55
Summary	57
II. HYPOTHESIS AND PREDICTIONS	61
III. METHOD	63
Procedure	63
Subjects	66
Demographic Data for Short, Average and Tall Subject Groups	67
Significant differences in demographic data among the three schools	75
IV. MEASURES	85
V. RESULTS	99
Questionnaire	99

Body Cathexis Scale (BC) and Security-Insecurity Inventory (SI)	115
The Security-Insecurity Inventory (SI)	117
Semantic Differential Measure	118
Interaction Effects for the Semantic Differential Data .	123
The Activity Vector Analysis (AVA)	139
Discussion	148

REFERENCES	242
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REFERENCES FOR APPENDIX K	232
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LIST OF TABLES

<u>Table</u>	<u>page</u>
1. Significant Differences in Demographic Data comparing Short, Average and Tall Subject Groups: The Means and Standard Deviations	71
2. Anova for Age	72
3. Anova for Height	72
4. Anova for Weight	72
5. Anova for Family Income	73
6. Anova for Grade-Point Average	73
7. Tukey-HSD Multiple Range Test for Age	73
8. Tukey-HSD Multiple Range Test for Height	74
9. Tukey-HSD Multiple Range Test for Weight	74
10. Tukey-HSD Multiple Range Test for Family Income	74
11. Tukey-HSD Multiple Range Test for Grade-Point Average	75
12. Significant Differences in Demographics Among the Different Schools	78
13. Anova for Age	79
14. Anova for Height	79
15. Anova for Weight	79
16. Anova for Family Income	80
17. Tukey-HSD Multiple Range Test for Age	80
18. Tukey-HSD Multiple Range Test for Height	80
19. Tukey-HSD Multiple Range Test for Weight	81
20. Tukey-HSD Multiple Range Test for Family Income	81

21.	Tukey-HSD Multiple Range Test for Grade Point Average	81
22.	T-TEST RESULTS BETWEEN THE TWO SHORT SUBJECT GROUPS	84
23.	ANOVA for Semantic Differential Data between the two Short Subject Groups	84
24.	Test-Retest Reliability for Questionnaire	93
25.	Internal Consistency of the Semantic - Differential Measures Used in This Study	97
26.	Test Retest Reliability Coefficients for Individual Items on the Semantic Differential	98
27.	The Actual and Ideal Desired Height for Male Subjects	102
28.	Means and Standard Deviations (Questions 1-11) for Short, Average, and Tall Questionnaire Responses	105
29.	Means and Standard Deviations (Questions 12-17) for Short, Average, and Tall Questionnaire Responses	108
30.	ANOVA Tests for the Questionnaire Data	111
31.	Tukey (HSD) Follow-up Tests for Questionnaire Data	113
32.	ANOVA for Body Cathexis Scale	115
33.	Tukey (HSD) Multiple Range Test for Body Cathexis Scale	116
34.	Means and Standard Deviations for the Body Cathexis Scale	117
35.	ANOVA for Maslow Insecurity Inventory	118
36.	Means and Standard Deviations for Maslow Insecurity Inventory	118
37.	Semantic Differential 3X3 MANOVA Design	119
38.	Semantic Differential Within Group Main Effects	120
39.	ANOVA for Averaged Rating Scales: Semantic Differential	123
40.	Simple Effect ANOVA for Semantic Differential Interaction Effects	124
41.	All Subjects Rating "Men of Short Height": Semantic Differential Averaged Scales. Tukey (HSD) Follow-up Test	124
42.	All Subjects Rating "Men of Tall Height": Semantic Differential Averaged Scales. Tukey (HSD) Follow-up Test	128

43.	Mean Factor Scores for Main Effects on the Semantic Differential Data	130
44.	ANOVA for Main Effects for Rated Height: Evaluation Factor .	130
45.	Tukey (HSD) Test: Evaluation Factor	131
46.	ANOVA for Main Effects for Rated Height: Potency Factor . .	131
47.	Tukey (HSD) Test: Potency Factor	132
48.	ANOVA for Main Effects for Rated Height: Activity Factor . .	132
49.	Tukey (HSD) Test: Activity Factor	133
50.	ANOVA of Interaction Effects for Semantic Differential Factor Scores	133
51.	Tukey HSD Test: Short Subjects Rate Height Grouping on Potency Factor	134
52.	Tukey HSD Test Average Subjects Rate Height Groupings on Potency Factor	135
53.	Tukey HSD Test: Tall Subjects Rate Height Grouping on Potency Factor	136
54.	Tukey HSD Test: Results of Average Height Subjects on the Evaluation Factor	136
55.	Tukey HSD Test: Results of Tall Height Subjects on Evaluation Factor	137
56.	Correlations of Ideal Self-concept With the Present Study .	151
57.	ANOVA for AVA Data: Activity-Role	154
58.	ANOVA for AVA Data: Activity Self	155
59.	Group Means and Standard Deviations for AVA Data	156
60.	ANOVA for AVA Data: Congruence	157

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
1. The Actual and Ideal Height for Males of Short, Average and Tall Height	103
2. Semantic Differential: Within Group Main Effects. Ratings of Men of Short, Average, and Tall Height	122
3. Semantic Differential: Men of Short Height	126
4. Semantic Differential Height Rated	127
5. Semantic Differential: Men of Tall Height	129
6. Simple Effects Tests for Factor Scores of Semantic Differential Measure	138
7. AVA Self-Concept and Social Self-Concept for Average Height Subjects	145
8. AVA Self-Concept and Social Self-Concept for Short Subjects	146
9. AVA Image Pattern Cluster for Average Height Subjects	147
10. AVA Image Pattern Cluster for Short Subjects	148
12. Pattern Shapes of Ideal Self-Concept for the Entire Sample	153
13. Female Response Pattern for Individual Items on Semantic Differentials (N=120)	227

LIST OF APPENDICES

Appendix	<u>Page</u>
A. Advertisement for Short Subjects	183
B. Introductory Statement to Participants	185
C. Demographic Data Sheet	187
D. Body Cathexis Scale	189
E. Activity Vector Analysis	191
F. Semantic Differential Measures	195
G. Maslow Psychological Security Inventory	199
H. Questionnaire	203
I. ANOVA Results of Individual Items: Semantic Differential	206
J. AVA Pattern Shapes for Short Subjects	209
K. Women's Attribution of personality Characteristics for men of short, average and tall heights	210
L. Excerpts from Interviews with short males	235
M. Wilk's Lamda conversion to F ratio	243a

Let me tell you my theory of small men, Captain, then let me hear what you think... Give me a guy less than five feet eight, Johnson, and I'll give you a real bastard nine times out of ten. It has been my experience that short men get a chip on their shoulder as big as an aircraft carrier. They're just pissed off at life and God and everybody else just because they're midgets. They came into the marine corps just so they can be proud and tough once in their lives. They like to strut around and pretend their dicks are as long as anyone else's. I'm a blunt man, Johnson, and I'll tell you that I always keep my eye out for a 'little guy' because I know he's down there low with his hands around my nuts waiting for a chance to give me the big squeeze. What do you have to say about my theory?

Colonel Bull Meecham in Pat Conroy's The Great Santini (1976)

Bond had always mistrusted short men. They grew up from childhood with an inferiority complex. All their lives they would strive to be bigger than others who had teased them as a child. Napoleon had been short, and Hitler. It was the short men that created all the trouble in the world.

Ian Fleming,
Goldfinger (1959)

Chapter I

INTRODUCTION AND REVIEW OF THE LITERATURE

1.1 HISTORICAL PERSPECTIVE

As the introductory statements highlight, very strong notions regarding the relationship between a man's height, behavior, and personality exist. Historically, there has been considerable lay and professional interest in the relationship between how one looks and how one feels or behaves. Ernst Kretschmer was one of the first researchers to study the relationship between psychopathology and body types in males. He was convinced that psychopathology could be better understood by increasing our understanding of the different body types. Kretschmer (1936) found a strong relationship between certain types of physical constitutions and certain psychoses. In this classic work Physique and Character (1936) he began the categorization of body types in an attempt to uncover the relationship between temperament and body type.

This line of research was carried on by the work of Sheldon (1940) who put forward the question "Do those who look most alike behave most alike" (p. 1). Both Kretschmer and Sheldon concluded that physical constitution was of primary importance in the shaping of personality. Basically, his method consisted of making predictions about an individual's temperament and preferences by "measuring his body" (p. 1).

Sheldon continued to maintain that physique was important in personality development (1940, 1942, 1954).

Later Barker (1946) restated the question labeling it the "somatopsychological problem" (p. 15). Like Kretschmer and Sheldon, he believed that an individual's physical attributes such as his size, shape, appearance and strength determined to a great extent, the kind of person he became.

1.2 THE CURRENT STATUS OF THE RESEARCH

Even though strong beliefs and opinions exist regarding the relationship between physical stature, behavior, and personality, there is little systematic research on the topic. Over thirty years ago, Barker (1953) noted that:

despite the importance that laymen and social scientists attach to the psychological significance of physique, relatively little has been done to determine systematically the extent to which normal variations in physique actually do influence behavior, and the means by which their effects are accomplished (p. 14)

In referring to the systematic study of short stature in particular, Barker (1953) reported that he was unable to find any investigations on this topic whatsoever. He found this situation curious in light of the fact that short stature was so frequently mentioned in the literature as a liability. In the thirty years that have elapsed since his work, the situation has not changed appreciably. The authors who have written on this topic consistently note that this important topic has been all but ignored (Keyes, 1980; Adams, 1980; Graziano, 1978; Prie-

to, 1978; Feldman, 1975; Gunderson, 1965). Adams (1980) questioned why so little research has been conducted and Keyes (1980) offers what appears to be a plausible explanation. He says:

I think the whole problem makes everybody nervous all around-with short people themselves wishing the issue would just go away, normal sized people often wishing short people would just go away (p. 92).

Remarkable progress has been made in recent years in the area of human height control making the "choice" of a particular stature a viable option. Human Growth Hormone, the chemical substance produced by the pituitary gland can stimulate growth, but its exceedingly limited supply has severely limited its use. However, recent breakthroughs in genetic engineering promise to make growth hormone available in large quantities at relatively low cost. Given this remarkable advance, it is essential that the psychosocial impact of short stature be better understood.

The question will soon arise as to whether or not an individual should be given pharmacological treatment for purely psychological reasons. It is certain that these advances will significantly increase the pressures upon parents, children, and physicians to use the pharmacological approach. Without a better understanding of the impact of short stature in males, the data base used to assess the costs and benefits of such a powerful intervention remains markedly incomplete.

The results of this study should significantly increase the pool of knowledge in what has been a sparsely researched topic area. The comprehensive approach of the study will substantially upgrade what has been a largely anecdotal and analogue research base.

1.3 IMPORTANCE OF PHYSICAL APPEARANCES

George Bernard Shaw once noted that "Beauty is all very well, but who ever looks at it when it has been in the house three days?" The answer is, almost everybody.

The Happy American Body
A Survival Report
 -- Berscheid, 1973

A. The Janus-Faced American Mythology

A Janus-faced American Mythology exists regarding the importance of physical appearance; the public one and the private one. The public version asserts that all individuals are treated equally in important life areas regardless of physical appearance. This is congruent with the American ideal of equality. The private mythology is at odds with this assertion, highlighting the supreme importance of physical appearance in important life spheres throughout the lifecycle. Western media attention to physical appearance highlights this point. Elliot Aronson has suggested that social scientists have avoided investigation of the topic because of fear they might learn just how powerful it is (Berscheid, 1972, p. 43). More recently Sokolov (1978) noted that:

You would expect then, that little people who have fallen short of the John Wayne image their whole lives would have acquired a poor self image. Well, it turns out that almost no one in the psychology field has paid any attention to the problem.

Berscheid (1972) who reviewed the literature on appearance and self-esteem concluded that:

Personality and self-esteem do not rest exclusively on satisfaction with one's body, but neither is the body an irrelevant shell in which the soul happens to live. We treat beautiful people differently from the way we treat homely ones, and denying this truth will not make a person's looks less important (p. 146).

In Berscheid and Walster's article (1972) they reported that the subjects seemed to prefer physically attractive individuals and that positive personality traits were associated with an attractive appearance. The subjects described the good-looking persons as being more sensitive, kind, interesting, strong, poised, modest, sociable, outgoing and exciting than less attractive persons (Berscheid, 1972 p. 46).

It is almost axiomatic that short males are not attractive, or at least not as attractive as their taller counterparts. This point is concisely made by the title of a recent article, Short, Dark and Almost Handsome (1975). Emphasis in this article was placed on the "almost."

B. Male -Female Differences in Body Cathexis

Males and females differ on various dimensions including physical size, socialization practices, and emotional development to name but a few. The research described in this review indicates that male and females also differ in the ways in which they think about and experience their own bodies.

The desired shape and size of one's body closely corresponds to the cultural stereotypes; the male desires to be large and muscular while the female desires to be small except for bust area (Caldy, Lundy, and Schlafer, 1959). More importantly, the symbolic meaning of the body and manner of body cathexis differs for males and females. Jourard and Remy (1957) explored the relationship between the degree of differentiation of self and the body image and found that women showed greater variability in what they called "cathexis-responsiveness" to the body than did men. What this meant was that men tended to accept or reject their bodies in a global all-or-none fashion whereas women made finer-grained distinctions between different aspects of their body. They concluded that the women:

have a more highly differentiated body image than men and that among women, the self-concept and the body image are differentiated to an equivalent degree... (p. 63)

These findings were reconfirmed by Kurtz (1969) and Goldberg (1974). Goldberg's findings were highly consistent with the previous findings in that the females in the study showed significantly greater variances than did the males on the body image items. In Western societies, women pay more attention to particular details of their appearance

whereas men are more concerned with the aspects associated with size, strength and the overall perceptual impact their body makes.

C. The "Ideal" Male Body

Short people got no reason to live/
 They got little hands and little eyes/
 They walk around telling great big lies/
 They got little noses and tiny little teeth/
 They wear platform shoes on their nasty little feet/
 Well, I don't want no short people round here/

Randy Newman
 Copyright, 1977
 High Tree Music Company

It is essential to emphasize that large body size has a symbolic meaning to males that is unique to their gender. Fisher (1973) pointed out that the shape and size of the body is imbued with special and important meaning. To be a tall and non-obese male is a highly valued physical characteristic. The inculcation of this "ideal" occurs early in development. In one study, Cobb (1954) reported that children emphatically believed that a tall, muscular physique was important for boys. This cultural "ideal" is imbued with symbolic meaning that indicates to those who are less than ideal that they have fallen short of an important mark. As Fisher (1973) succinctly summed it up:

All other things being equal, the larger man is viewed as more manly. We know that tall men tend to get better paying jobs than short ones, presumably because they make a more forceful impression. It has been said that the short man feels inferior and is sometimes driven to do big, masculine things in order to prove his true size (p. 119).

Given such a set of environmental circumstances, stereotyping and cultural expectations, it is clear that myriad difficulties confront the short male in terms of negotiating and solidifying a positive male identity.

The consensus regarding the physical appearance that a male "should" have appears to be unequivocal. The ideal seems to favor a large mesomorphic body build and it is this body build that is strongly associated with masculine characteristics. This may have profound developmental and personality implications for the male of short stature. It is interesting that one researcher concluded that "it seems that childhood teasing has a lasting effect. People who were teased as children... are less satisfied with their bodies as adults... and the relationship between having been made fun of as a child and later body image was stronger for males than for females" (Berscheid, 1972 p. 122).

D. Body Satisfaction in Males

The relationship between perceived masculinity and size was tested by Jourard and Secord (1954). In their study, 62 College males completed the body cathexis scale (Secord and Jourard, 1953). After the subjects completed the scale, pertinent body measurements were taken (i.e., height, weight, width of shoulders, circumference of the biceps) and correlations between these measurements and the five pertinent body cathexis ratings were computed. The results indicated that large size of relevant body parts was associated with positive cathex-

is, while the reverse was true for small size. Hence, their work established the relationship between positive attitudes towards one's own body and large size.

In a replication of Secord and Jourard's (1953) work, Magnussen (1958) had 62 male undergraduate subjects complete a form of the Body Cathexis Scale.

Upon completion of the Body-Cathexis Scale, and without previous information regarding procurement of bodily measures, anthropometric measurements were taken on each subject for height, weight, shoulder width, and chest circumference. It was felt that these variables represented "masculinity".

They found that large size was a desirable attribute among college males, and "the presence or absence leads to contrasting feelings toward related features of the male soma"(p. 34).

In their later study, Jourard and Secord (1955) found that "cathexis for selected body aspects will vary with the extent of deviation perceived and measured of size of body parts for self-ratings of ideal measurements" (p. 243). Calden, Lundy, and Schlafer (1959), using the same line of reasoning, asked 110 male college students to fill out a questionnaire which asked for estimates of the size of various body features and statements as to the extent of satisfaction with these features. The results solidly confirmed that males distinctly prefer largeness of bodily proportions. Of the males who voiced dissatisfaction with their body features, all but two of them wished to be taller.

Gunderson (1965) who modified the Secord and Jourard Body Cathesis Scale obtained self-ratings of various body areas from navy enlisted men. He found an almost perfect linear relationship between satisfaction with one's height and deviation from the ideal. Those who were either too short or too tall were the most dissatisfied with their height. They concluded that height appeared to have a pervasive effect upon self-evaluation generally. Short underweight and short overweight groups had the most unfavorable self-image (p. 902).

In another study, Arkoff and Weaver (1966) examined the body image and body dissatisfaction in Caucasian and Japanese-Americans. Their sample consisted of 87 third generation Japanese-Americans (35 male and 52 female) and 53 Caucasian-American (29 male and 24 female) college students. The Body Cathexis Questionnaire (Jourard and Secord 1953) was the measure administered. They found that both the Caucasian and Japanese American males wanted to be large in all of the dimensions under study except for their hips and waist. As was hypothesized, the Japanese-Americans, who were shorter, were farther from their ideal in terms of height and bicep size. The authors concluded that the dimensions of height and upper body shape (i.e., the classic tall mesomorphic build) symbolizes masculinity in the American culture. This "ideal" is one that is generally accepted and aspired towards. Hinckley and Rethlingshafer (1951) found that the men who were most satisfied with their own height were the 6 foot 2 inch subjects and the least satisfied individuals were those who were unusually short.

These findings are rather consistant and have profound implications for understanding the psychology of the short male. A man's body image and subsequent cathexis is based on a few dimensions that directly reflect the stereotypic cultural standard regarding the male build. The manner in which the body is cathected appears to be substantially different between the sexes.

In an early study of masculine inadequacy and compensatory development of physique, Harlow (1951) noted that:

Since the male, in almost all societies, is the sex expected to be strong and dominant, the given physical sex difference can easily become a symbol for male superiority. It follows that the more highly developed are the secondary masculine characteristics, the more manly the individual is often considered. (p. 313)

In a recent interview (Playboy, Feb. 1984), the highly successful songwriter Paul Simon articulated the essence of this perceived relationship between physical size and manliness. When the interviewer asked him what role being short had played in his life, he replied:

I think it had the most significant single effect on my existence, aside from my brain. In fact, it's part of an inferior - superior syndrome. I think I have a superior brain and an inferior stature, if you really want to get brutal about it.

All in all, men value bigness of body parts and it appears much of the role of being a man is inextricably interwoven with the notion of "bigness." Developmentally, males test themselves based on this physical dimension and if they do not "measure up" they have difficulty

competing in sports and succeeding in heterosexual involvements. The symbolic meaning of the body to the male is different than that for the female. That is, the male must have a body that can offer physical security to self and others. If the male is unable to meet this challenge, the expression of this failure may emerge as a defensive psychological stance.

1.4 THE RELATIONSHIP BETWEEN PHYSICAL APPEARANCE AND PERSONALITY

A. Body Characteristics and Personality

An extensive literature search revealed few articles that dealt specifically with the relationship between height and personality. Barker (1953) reviewed twenty-seven studies of which sixteen of them reported statistically significant positive correlations between physical size and positive behavior characteristics. In nine studies, the correlations were non-significant, and in only two of the studies were the results negative. Barker felt that the two negative results were reflective of the inadequate measures used in these studies. He concluded that there was solid evidence for the correlation between "positive" (i.e. good, valued, and approved of) characteristics and physical size.

Hood (1963) examined the MMPI profiles of groups representing extremes of height and weight. The subjects were drawn from a large college student population at the University of Minnesota. In this

study, the entering male freshmen who were sixty-five inches or shorter and seventy-five inches or taller were compared with each other and a general student population sample. He found that the short males scored slightly but statistically significantly higher ($p < .05$) than extremely tall subjects on the inferiority and depressions scales of the MMPI. These findings indicated that feelings of inferiority and depression were inversely related to height.

Adams (1980) studied 128 adult men and 173 adult women to assess personality differences that could possibly be attributed to physical characteristics. In extended interviews the subjects offered self-report information on various personality measures assessing locus of control, assertiveness, intelligence, emotionality, and responsibility. They were also questioned about social behavior indicators such as the number of personal visits, the degree of social involvement, self-perceived satisfaction, and social interaction. The findings were consistent with those already cited. Height was found to be associated with sensation seeking, likableness and self-directive locus of control. Height was found to be negatively correlated with emotional expression and the belief in luck or chance in directing one's life. That is, the taller individuals were found to be less emotionally expressive and they experienced themselves as being more in control of what happened to them in life.

The research that directly assesses the relationship between height and important personality variables points to the possibility that physical characteristics such as size may account for a significant portion of the variance in this complex equation.

B. The Development of a Defensive Style

It is as if man feared that he was too small and walked on his toes to make himself seem taller. Sometimes we can see this very behaviour if two children are comparing their height. The one who is afraid that he is smaller will stretch up and hold himself very tensely. He will try to seem bigger than he is. If we asked such a child, "Do you think you are too small?" we should hardly expect him to acknowledge the fact.

Alfred Adler (1956) believed that the desire to obtain power was a central motivating force in one's life. Based on this supposition, he postulated that people who feel that they are not quite adequate on a physical level may develop an "inferiority complex." The term that Adler introduced for this was the "Napoleon Complex." Adler believed that attitudes about body characteristics play a crucial role in determining our entire psychological development. According to Gillis (1980), both Freud and Adler maintained that feelings about our bodies are to a great extent stored in the unconscious regions of our minds.

Willhelm Reich (1945) proposed that the development of such a defensive posture takes the form of what he called "body armor." That is, our defensive posture will be reflected in the way we feel about and use our body as a protective sheath.

More recently, Fisher (1973) reaffirmed the supposition that individuals who do not feel good about their bodies will develop self-protective maneuvers. He goes on to say that these maneuvers,

often eventuate in their doing strange things to their own bodies. They are defensively driven to camouflage and reshape their frames in an effort to hide from themselves and others body feeling that are threatening. (p. xii).

The short male is frequently reminded that his body is inferior. For example, he may experience much difficulty in finding clothing or he may be unable to sit comfortably in a bar (Feldman, 1975). All in all, the point that these theories make is that dissatisfaction with one's body will lead to adoption of compensatory mechanisms. Adler (1956) goes on to say,

No human being can bear a feeling of inferiority for long; he will be thrown into a tension which necessitates some kind of action. But suppose an individual is discouraged; suppose he cannot conceive that if he makes realistic efforts he will improve the situation. He will still be unable to bear his feelings of inferiority; he will still struggle to get rid of them; but he will try methods which bring him no farther ahead. His goal is still 'to be superior to difficulties,' but instead of overcoming obstacles he will try to hypnotize himself, or autointoxicate himself, into feeling superior. Meanwhile, his feelings of inferiority will accumulate, because the situation which produces them remains unaltered. The provocation is still there. Every step he takes will lead him farther into self-deception, and all of his problems will press in upon him with greater and greater urgency (p. 258-259).

In regards to development, each individual must come to terms with the body that he inhabits. Fisher (1973) points out that

each person in the world has to learn how to feel secure in that most fundamental home base of all, his body. He has to develop confidence that the walls of his body can adequately shield him from all potentially bad things 'out there.' (20)

If one does not successfully negotiate this most fundamental task, Fisher believes, there is a possibility that he will seek compensatory ways of reaffirming his own body boundaries (Fisher, 1973).

If a sense of bodily vulnerability develops, its effects may be long lasting. Kagan and Moss (1964) studied the role played by bodily feelings in long term behavior. The authors treated the subjects in the Fels Research Institute longitudinal study. These subjects were

rated while they were still children with regard to fear of bodily harm. They were rated on the presence of certain irrational fears, avoidance of dangerous play, and the degree to which they were disturbed by injury and illness. The finding to emerge was that,

the boys who showed evidence of intense physical harm and anxiety during the pre-school years, were, as adults, anxious about sexuality, uninvolved in traditionally masculine activities, and highly concerned with intellectual competence and status goals (p. 191).

While this study did not address the role of short stature, it did note that a flight from the body world may be accompanied by an increasingly cerebral approach to life. This may be of some importance in understanding the personality of the short male. Martel (1984) in an interview study has noted that there may be a significant socioeconomic and subcultural difference in the way short males manage their "shortness"; with lower socioeconomic status groups becoming more aggressive and upper middle class groups becoming more cerebral in their approach to life. The short male exists in a social milieu where "aggressive acting out is considered to be a mark of the masculine mode (Fisher, 1973, p. 58) and yet to act in such a manner would most likely be physically dangerous for the small male. Keyes (1980) straightforwardly explains that unlike larger individuals,

smaller people by contrast, throughout their life are reminded that they'd better be careful or they might get hurt. Implicit in such reminders is the lesson that physical well-being in the presence of larger bodies can depend on the ability to be agreeable (p. 286).

Moreover, Fisher (1968) comments about the different styles one can use in handling angry impulses:

in such situations there is a conflict between wanting to express the anger in an aggressive self-determined fashion

and fear of the consequences of being aggressive. ...The individual who reacts to conditions of frustration simply by becoming anxious or blaming himself is adopting an orientation quite the opposite of what one should associate with a lifestyle built around active mastery and structuring of the environment (p. 132).

This is often seen in the anecdotal literature. For example, five foot tall songwriter Paul Williams explained the development of his comic sense of humor by saying that if one were humorous "they weren't going to punch you" (Keyes, 1980, p. 288). Five foot actor Dudley Moore also learned to negotiate his way in the world through use of humor. He says of this: "People like to laugh, and they love those who can make them do so" (Time magazine, Feb. 21, 1983).

This defensive style is apparently often characteristic of the short male. It has in fact been called the "clowning or mascot-adaptational response" (Finch, 1978). Evidently, short males themselves feel that it was essential for them to develop such a defensive style as a matter of psychological and physical survival. Actor Joel Grey, who is short, replied in regard to this supposition that it was:

'how I used to get out of fights with guys who were a lot bigger,' Grey recalled. 'I'd use my humor.' He smiled, but the smile slowly dissolved and finally disappeared. Grey shook his head, adding 'not good'. 'What's not good about humor for survival,' he continued, 'is that you end up not really saying what you feel to the person because they're a danger. And you don't feel good about yourself because you've copped out, so to speak, when actually what you've done is to be practical' (Keyes, 1980, p. 102).

Some research evidence does exist to support this viewpoint. Sperling (1975) studied the leisure activity preference of adolescence as related to body image. Using seventy-five males and seventy-five females (age fourteen, grade nine), he administered a leisure activity

preference questionnaire and the Draw-A-Person test to measure body image. He found that those students who were most involved in intellectual activities had the lowest body image scores. Apparently, he concluded, they avoided athletic activities while giving increasing amount of time to intellectual tasks.

This reaffirms Fisher's (1973) view that,

there is trustworthy evidence that body attitudes affect the way people act in the non-body world 'out-there.' (p. xii)

This particular defensive posture is one that Fisher (1973) addresses. Such individuals, he believes, will flee from the "body world" into intellectual endeavors. He says, "a successful career as a student calls for endless hours of sitting (with body almost immovable) while absorbing information from books. The body is largely superfluous to the whole scholastic enterprise" (p. 15). Such individuals, he believes, would attach low importance to the body feelings, minimizing its existence.

In sum, it appears quite plausible that short stature in males may lead to the adoption of a distinct and identifiable defensive style. As a result of a sense of body inferiority and vulnerability, the development of an excessive reliance on rational and analytical skills ensues. Paralleling the development of cerebral dominance is the denial of the importance of the body. In order to satisfy the need to express aggressive impulses without fear of retribution and in order to gain acceptability in peer groups, the short male develops a well-articulated sense of humor.

C. Body Cathexis and Self Concept

The perception of one's own body occupies a unique place in the world of object perception. This is so because one's own body is both used to perceive and is part of the perception (Fisher, 1965). Because of this unique difference it has been hypothesized by Fisher (1973) that the body image may frequently serve as a screen or target upon which an individual projects significant personal feelings, anxieties, and values. Fisher explains that,

there is an unusually intense level of ego involvement evoked by one's body as an object of perception. When an individual reacts to his own body, he is stirred and aroused in a manner that rarely occurs when he reacts to the non-self world (p. 49).

This finding has been repeatedly confirmed (Johnson, 1956; Weinberg, 1960; Wylie, 1961; Fisher, 1965; Zion, 1965; Rosen and Ross, 1968; Fisher, 1970; Darden, 1972; Lerner, 1973) and such results have important implications for the study of the psychosocial impact of short stature. The body may be seen as a kind of anchor point for the inclusive concept of the self (Secord and Jourard, 1953) and the short male's body may not provide a solid anchor from which to build. This leads us to the plausible conclusion that whether a person feels that:

his body is big or small, attractive or unattractive, strong or weak tells us a good deal about his self-concept or his typical manner of relating to others (Fisher, 1964, p. 520)

It was Freud (1924) who wrote that "the concept of the self is first and foremost a body ego construct." Psychoanalytic theorists have not failed to take note of this as exemplified by Fenichel's (1945) statement that,

to the simultaneous occurrence of both outer tactile and inner sensory data, one's own body becomes something apart from the rest of the world and thus the discerning of self from non-self is made possible. The sum of the mental representations of the body and its organs, the so-called body image, constitutes the idea of I and is of basic importance for the further formation of the ego (p. 35-6)

It is a generally accepted premise that the way one feels about one's body will have substantial influence over the way one feels about the self. Essentially, it is believed that unfavorable "body image" will undermine positive feelings towards the self (Wylie, 1961).

Using a body cathexis measure the Multiple Affect Adjective Checklist, Goldberg (1974) found that body image was negatively correlated with anxiety, depression, and hostility. That is, those with a poorer body image were more prone to anxiety, depression, and hostility.

Such a relationship was first articulated by Secord and Jourard (1953) and Jourard and Secord (1954, 1955). In these pioneering studies they used their newly-developed body-self cathexis scale defining body cathexis as "the degree of feeling of satisfaction or dissatisfaction with various parts or processes of the body" (p. 343). They predicted that they would find a relationship between an individual's feelings about the self and his body. In addition, they hypothesized that a relationship existed between negative feelings about the body and insecurity involving the self. Testing this hypothesis on 70 college males and 56 college females the results revealed a correlation for men of .58 and for women .66. These results suggested that the body and the self were cathected to about the same degree. As impor-

tant, they found that individuals who had low body cathexis scores were also more insecure, as measured by the Maslow Insecurity Test (1954). Secord and Jourard (1953) concluded that negative body feelings were associated with feelings of insecurity involving the self.

In their next study, Jourard and Secord (1954) examined the relationship between actual measured size of body characteristics and body cathexis. Their 62 male undergraduate subjects filled out the Body Cathexis Questionnaire (Secord and Jourard, 1953) and their body measurements were taken. The resulting correlations were significant beyond the .01 level except for the variable of weight. It was their conclusion that large size was associated with strong positive feelings while small size was associated with weak or negative feelings.

Weinberg (1960) administered the Homonym scale, Body and Self Cathexis scales in order to replicate Secord and Jourard's findings. The Maslow Security-Insecurity scale was also administered. Once again, the body cathexis and self cathexis scores yielded significant positive correlations. Moreover, lower scores on the body and self cathexis scales were related to feelings of insecurity and this relationship was of great magnitude for men.

Rosen and Ross (1968) refined the techniques somewhat by examining whether or not the reported importance of particular parts of the body would affect the correlation between self-concept and body cathexis. Using 82 undergraduate subjects they found that the self-concept scores were much more positively correlated with the body cathexis scores derived from the ratings of body parts as seen as having high

importance than with cathexis scores on body parts seen as having low importance. Nineteen years after Secord and Jourard's first study, Darden (1972) reached the similar conclusion that,

it appears that the confidence an individual has in his body is related to the confidence with which he faces the self and the world (p.7)

Other researchers (Biller, 1967; Biller and Liebman, 1971) have reported that male adolescents who have unmasculine physiques are more likely to have a poor self-concept. Biller (1974) writes:

A boy can have a masculine orientation and preferences but be limited in the development of a masculine adoption by an inadequate or inappropriate physical status. For example, a boy who is very short or very thin would seem to be at a disadvantage. Height and muscle mass seem positively related to masculinity of sex role adoption. Though a particular type of physique is not sufficient to provide masculine behaviour, a boy who is tall and broad or broad though short is better suited for success in most masculine activities than a boy who is tall and thin or short and thin. (p. 18)

Additional studies have arrived at similar results. Lerner (1973) studied the relationship between physical attractiveness, body attitudes, and self-concept, finding that there were consistent attitudes about the importance of certain body characteristics and that body satisfaction was related to self-concept.

D. Self Esteem

There is evidence that the way in which one feels about oneself is reflected by one's level of self-esteem. The research indicates that self-esteem, like self-concept, is related to one's level of satisfaction with one's own body. Self-esteem may be defined within a context of self-other orientation. According to Ziller (1969) the individu-

al's self-esteem is based on paired comparisons of the self and significant others. One's own self-evaluation develops and is maintained within a social frame of reference. The short male is consistently confronted with this social frame of reference.

In a study that highlights this point, Prieto (1975) discusses the powerful effect others have on an individual's self-esteem. In this study, which focused on the perception of height and its relationship to self-esteem, 69 male junior highschool students, ages twelve to fifteen, were administered a battery of tests including an estimate of one's own and peer's height. It turned out that the teacher's evaluation of a student's height had a higher correlation with self-esteem than did the student's own self-evaluation of his height. They concluded that

there is evidence not only that an individual's self-perceptions of this physical characteristic is related to his self-esteem, but also that perceptions of an individual's height by significant others contributes to this. (p. 397)

These results fit well with Wylie's (1961) assertion that aspects of the physical self which significant others devalue will undermine self-regard.

Berscheid (1972) found that for both males and females, body image was closely tied to self-esteem. In her study, only eleven percent of those individuals with below average body image scores were found to have above average levels of self-esteem. In this study, the men who were most dissatisfied with their bodies also tended to be the ones who felt most uncomfortable around other men, once again emphasizing the social-evaluative nature of self-esteem.

Men, it appears, are particularly sensitive to the social-evaluative aspects of self-esteem. Their sense of competence as a man is threatened if their bodies are self-perceived as inadequate. For example, Gunderson (1965) studied a population of navy enlisted men ages 17 to 21 ($M=18.9$). Their attitudes toward the self and body were measured by the Secord and Joulard (1953) Body Cathexis Scales. The influence of social norms upon their self-evaluations was evident in that they found that deviations from the ideal height (72 inches) in either direction resulted in increasing dissatisfaction. He adds that

the cultural ideal for body size appears to be slightly larger than actual body size for this population. Many young adult males apparently find small body size a threat to self-esteem and tend to depreciate their own personal worth based upon this perception (p. 906).

Gunderson (1965) concludes that physical characteristics "play a significant part in self-evaluation and that research in the area of self-concept or self-regard should take the 'real' characteristics of persons into account" (p. 906).

In essence, the research supports the hypothesis that relationships between one's feelings toward the self and one's body are meaningfully related. Developmentally, if one does not become firmly anchored or secure with regards to one's body, it will have implications for one's way of being in the "non-self" world. The negative feelings associated with low body image may lead to insecurity involving the self with consequent implications for personality development. The research points to the possibility that small body size in males may have powerful influence in on the development of self-concept in males.

1.5 THE DEVELOPMENTAL IMPACT OF SHORT STATURE IN MALES

A. The Developmental Impact in Childhood and Adolescence

The literature pertaining to the emotional, behavioral, and personality development of the short male is sparse but consistent. The literature strongly supports the hypothesis that childhood and adolescence are difficult times for the short male and that the effects of the developmental difficulties are long lasting.

A Yale medical school thesis (Finch, 1978) provided the only study describing the clinical evaluation of short stature. Finch (1978) reports that nearly three times as many boys presented for evaluation of short stature, reflecting the concern that parents have for growth patterns of their male children. In this study 84% of the subjects were smaller than 97% of their peers. Finch reported the situations in which the concerns of short children, ages eight to fourteen, were frequently expressed. The children described difficulty associated with peer teasing, symptoms such as crying, fighting and the clowning or "mascot-adaptational" response. The parents of these children were concerned because their short children were preferring the company of playmates who were three to four years younger than themselves. The short boys reported being particularly distressed because they could not compete successfully in sports. One boy described himself as having been "physically and psychologically injured (p. 80)" by his short stature. The onset of adolescence was found to be difficult for this clinical sample, with more than one-third of all of the boys age 14-18

stating that their relative lack of growth was a major source of distress for them.

Finch (1978) concluded by stating that "...any child who is consistently perceived by others to be younger than his years is clearly susceptible to abnormal personality development" (p. 81).

B. Early and Late Maturers

Although there has been little research on the assessment of the psychological and social impact of short stature in males, there has been research assessing the psychological, behavioral, and personality differences between late and early maturers. It is essential to note that there is a strong and positive relationship between being a late maturer and being of small physical stature (Dyer, 1968). Short stature and late maturation are thought to reflect each other (Siegal, 1982; Tanner, 1970; Dyer, 1968; Weatherly, 1964). Weatherly (1964) for example, describes the late maturing boy as having "relatively small immature stature" and Dyer (1968) refers to the late maturer's "lack of physical growth" while Tanner (1970) describes the late maturer as "inhabiting the world of the small boy." In essence, the late-maturer is, more often than not, the boy of short stature and much of what is stated by these authors may be applicable to the short boy.

It is of at least historical significance to reflect upon the long-standing belief that physical appearance is correlated to maturation level. Baldwin (1921), who was the foremost investigator of physical growth at that time wrote:

Physiological age is, the writer believes, directly correlated with the stages of mental maturation... The physiologically more mature child has different types of emotions, and different interests, from the child who is physically younger though of the same chronological age. (quoted in Gates, 1924)

Even so, one usually judges children by their chronological age and bases expectations on this. The joke "act your age, not your shoe size" reveals the dilemma the small boy might have. In fact, it is important to highlight that an individual who is chronologically age fourteen could either be pre-adolescent, mid-adolescent, or post-adolescent. For example, as Tanner (1970) in his chapter on physical growth writes,

manifestly, it is ridiculous to consider all these three boys as equally grown up either physically, or since much behavior at this age is conditioned by physical stature, in their social relations. The statement that a boy is fourteen is in most contexts hopelessly vague. (p.86)

The research assessing the impact of early and late maturational development is of both high quality and consistent findings. In the earliest of these studies Mussen and Jones (1957) hypothesized that more of the late maturers would score high in variable related to "negative self-conceptions, dependence, aggression, affiliation, rebelliousness, and feelings of being diminished and rejected" (p. 244). It was their view that adult and peer attitudes toward the boys as well as their treatment and acceptance of the boy would be related to his physical status. In this study, personality structure was measured by means of the Thematic Apperception Test.

The subjects were thirty-three seventeen year old males who were selected on the basis of their physical maturity status. Sixteen of

the boys were among the group that was most consistently accelerated throughout the adolescent period while the other seventeen had been among the most consistently retarded.

The results of this study supported their hypothesis that the boy whose physical development is retarded is exposed to a sociopsychological environment that is quite different than that of the early maturer. It was their conclusion that the environment of the late maturer may have adverse effects on his personality development. They felt that the late maturer was in a disadvantageous competitive position in athletic activities and that he was treated as immature by others.

The result of this might lead to:

negative self-conceptions, heightened feelings of rejection by others, prolonged dependent needs, and rebellious attitudes toward parents. Hence, the physically retarded boy is more likely than his early maturing peer to be personally and socially maladjusted during his late adolescence (p. 252).

This study did not assess possible mitigating factors such as above average intellectual functioning or special talents. It has been noted by one author (Washburn, 1962) that a secure family environment may be one such mitigating factor. Generally, in this study, the early maturing boy presented a highly favorable personality picture with regard to important social variables.

In a similar study, Jones and Bagley (1950) studied sixteen boys who were most consistently retarded during four and one-half years beginning at the average age of fourteen. The results confirmed that the early maturers were rated as superior in physical attractiveness. Moreover, their builds were more mesomorphic and they experienced more

rapid growth in height. They also noted that the early maturers were rated as more "masculine" in their build. They found that the late maturers were more "attention-getting", displaying less mature behavior. They speculated that the small boy may be acting in such a manner because this is "the only technique he knows to hold the attention of others and to compensate for his physically less favored status (p. 145). In addition, the early maturing boys were more athletically involved, held important school offices, and had more prestige. In this group "two of the sixteen early maturing boys became student body presidents, one was president of the boys club, and several were elected to committee chairmanships and four attained outstanding reputations as athletes. Of the sixteen late maturing boys, only one attained an office (class vice president)" (p. 146). Their conclusion that early maturation is advantageous is well founded.

In a later study, Mussen and Jones (1958) studied the behavior inferred motivation of late and early maturing boys. Behavior inferred motivation means that underlying drives are inferred from observable behavior. The subjects for this study were part of a normal sample of 90 boys who were participating in the Adolescent Growth Study (Jones, 1943). These were the same physically accelerated and physically retarded boys as in their previous work. In this study, the subjects had been rated on nine drives selected from Murray's list of needs. These included the drive for autonomy, drive for social ties, drive for social acceptance, drive for achievement, drive for recognition, drive for abasement, drive for aggression, drive for succorance, drive for control, and drive for escape. The strength of these drives was

inferred from behavior observed in a wide variety of situations. In making the ratings, the judges were asked to forget about manifest behavior and to group the children according to assumed motivation rather than according to similarities of displayed techniques.

Mussen and Jones found that there were distinct differences between the early and late maturers in the social behavior sphere. Even though the late maturers were highly motivated toward social affiliation, the ways in which they went about it were seen as childish and affected. It was also felt that the high social drives were based on general insecurity as was reflected by tenseness, impulsiveness, and the higher dependency needs. All in all, the authors once again concluded that physical retardation may adversely affect personality development.

Weatherly (1964) classified 234 males and 202 female college students into groups of early, average, and late maturers and then compared them on a number of personality measures. It is worth noting that the subjects were about two years older than the subjects at the completion of the Adolescent Growth Study. In addition, a number of objective personality measures were used whereas only the Edward Personal Preference Schedules was used in the Adolescent Growth Study. He found that late physical maturation represented a distinct handicap to the personality development of boys and that these effects are less profound in girls than boys. In agreement with previous researchers he concluded that the psychosocial environment is more stressful for the late maturers and that the late maturer must enter Junior or Sen-

ior High School "with the liability of a relatively small immature physical stature" (p. 1198). Weatherly describes the process of a circular feed-back loop in which the environment of the late maturer is one that is "conducive to feelings of inadequacy, insecurity, and defensive 'small boy' behavior" (p. 1198). As part of the transactional feedback loop, it has been observed that others expect more of the taller well-developed male. It has been found that when cognitive cues, such as the knowledge of a child's age, conflict with perceptual cues, such as the child's perceived height, the latter is the greater determinant of adult expectation for a child's achievement (Brackbill and Nevill, 1981). Biller (1968) has also noted that parents of tall, broadly-built, mesomorphic boys seem to expect more masculine behaviour from them. As Weatherly (1964) points out, the many different studies using different procedures, measures, and subjects, have all arrived at the same conclusion. Tanner (1970) sums it up nicely:

the world of the small boy is one where physical prowess brings prestige as well as success, where the body is very much an instrument of the person. Boys who are advanced in development, not only at puberty but before as well, are more likely than others to be leaders. Indeed this is reinforced by the fact that muscular, powerful boys on average mature earlier than others and have an early adolescent growth spurt. The athletically built boy not only tends to dominate his fellows before puberty, but by getting an early start, he is in a good position to continue the domination (Tanner, 1970, p. 92)

C. Physical Appearance in Adolescence

If a group of adolescents who do not know one another is asked to select a leader, the group tends to choose a large boy, and shorter adolescents are well aware of this.

Dwight, 1968, p.365

As Johnson (1956) observed, the onset of adolescence brings with it acute awareness of the small boy that he is noticeably different in important and disapproved ways. An essential developmental task of adolescence is the acceptance of the body as the symbol of self, and this is something that may be difficult for the short boy to do.

Adolescence presents challenges and difficulties for all those passing through this stage of development, but it is a particularly difficult time for those who are perceived as being substantially different in some important way. In adolescence, the individual is acquiring an increasing sense of psychological and physical self and the very phenomenon of physical growth becomes invested with symbolic meaning (Dwyer, 1968). The lack of physical growth may come to signify lack of growth in other important areas as well. Dwyer (1968) concludes that the reason that being different in adolescence is so difficult is because being different is tantamount to being inferior, and to be short is to be thought of as an inferior trait.

Siegal (1982), writing in the Handbook of Developmental Psychology reminds the reader that physical size, appearance, and abilities are standards by which people evaluate themselves and others from early

childhood on. With the onset of puberty the concerns about bodily appearance come to the forefront. He adds that:

Even among normal children, approximately one-third of the adolescent boys report distress and dissatisfaction with some aspect of their physical development or appearance (p. 539)

D. Beyond Adolescence

This brings up the point as to the persistence of these effects over time. Jones (1957) followed the later career of boys who were early or late maturers. In this study, the California Psychological Inventory and the Edwards Personal Preference Schedule were administered and a number of significant differences between the two groups were found. The early maturers scored higher on measures of "good impression and socialization" (p. 127). Where differences were ascertained they remained in adulthood. Mussen and Jones (1957) concluded that the difference between adolescent personality attributes such as motivation, self-conceptions, and attitudes toward others, were rather durable over time.

In the same year, Ames (1957) reached similar conclusions from her longitudinal study of physical maturing among boys as related to adult social behavior. The participants were forty men who were members of the Adolescent Growth Study of the Institute of Child Welfare at the University of California, Berkeley. Adult social behavior was partitioned into "informal social participation, formal social participation, and occupational participation." The results of this study paralleled previous findings noting that the psychological, physical, and

social advantages for early maturers are maintained into adulthood. The late maturers, on the other hand, were found to either remain or become less socially active as a group as they got older. Interestingly enough, the rate of maturation during adolescence as measured by skeletal age indices determined from x-rays proved to be a better predictor of adult social behavior than any of the other variables used. That is, just this one factor: size, was the best predictor of adult social behavior. In fact, if the 1% level of confidence had been used as a test of the null hypothesis, only this index of skeletal maturation would have proven significant. Ultimately, those who have written on the topic reached the same conclusions. Siegal (1980) notes that "the short, beardless, and generally immature boy will suffer social and psychological consequences." While this may be different for the short physically mature youngster, there is little research to support this. It is a confusing world for the smaller than average male because,

a contrasting set of expectations entirely faces those growing up small. What's 'expected' of them is childlike behavior. Looking younger than they are because of their size, such children got treated as younger even by bigger kids their own age (Keyes, p.279)

John Money highlights the point that human beings have an automatic, unthinking capacity to orient themselves toward other people on the basis of stature and physique as indexes of age and mental maturity (Money in Keyes, 1980). The differences found in the studies are real and measurable differences that leave indelible traces on the personalities of such individuals.

In summary, those children who are late maturers are found to be consistently less well-adjusted and less-involved, with poorer social behavioral skills. Moreover, a measure seemingly so innocuous as bone size proves to be a most potent predictor of adult behavior. Such findings indicate that the potentially powerful impact of physical size on personality development has been underestimated. And this is particularly the case for the short, immature-looking male.

E. Dating and Marriage

Since growth is considered an important achievement, children are proud of surpassing others and of approaching or even - in adolescence - exceeding the height of their parents. If we further add the power tallness gives and the disadvantages shortness holds for children and adolescents in the group of their contemporaries, the significance of height in the competition between the sexes, the equating of tallness with adulthood and shortness with the subordinate estate of childhood, we can understand the desirability and "beauty" of tallness.

Beigel, 1954, p. 257

Data supporting the hypothesis that short men are not viewed as being as attractive as tall men is overwhelming. This awareness emerges rather forcefully for the short male as he approaches adolescence. Quite simply, the shorter male is not as desirable a dating partner (Graziano, 1978) and "shorter males, as a rule, do not strike the female as true men" (Beigel, 1954). At the very least, it is clear that the short boy is socially "handicapped" (Dyer, 1968). The short male develops in a social context in which few positive options are available to him. The short boy intuitively knows, and his peers frequently emphasize the social reality that,

Personality and all other things being equal, most girls probably prefer tall and handsome boys to those who are short and handsome (Dyer, 1968, p. 366).

Even when the short boy is "good-looking" he is found wanting in terms of an essential male ingredient: height. This is bound to have some developmental implications. Even those individuals of short stature, who go on to become high achievers, bitterly recount their developmen-

tal difficulties. For example, actor Dudley Moore recently recounted his past:

I felt very humiliated about my height when I was a child. Then, when I became interested in what can only be described as the opposite sex, I felt that being small was a disadvantage. I felt unworthy of anything, a little runt...." (Time Magazine, Feb. 21, 1983, p. 70).

The universally acknowledged cardinal rule of dating and mate selection is that the male will be significantly taller than the female partner. This "rule" is almost inviolatable (Keyes, 1980; Gillis, 1980; Graziano, 1978; Berscheid and Walster, 1974; Berscheid, 1972). In fact, Keyes (1980) conducted a survey in which he found that out of 79 women, only two (both were five feet eleven inches) said they would date a man shorter than themselves. The remainder of the women reported that, on the average, they would only date a man who was at least 1.7 inches taller than themselves.

In a study examining the influence of the male's height on interpersonal attraction, Graziano (1978) reported that the influence was profound indeed. In this experiment 100 short, medium, and tall women, age 18-22, evaluated pictures of men whom they believed to be either short, medium or tall. He found that all women, regardless of their own height, found tall men to be significantly more attractive than short men. They also found that men of medium height (in this study medium height is almost six feet tall) were perceived as being the most attractive, well-liked, and having the most desirable personality traits. Martel (1984) asked 170 female college students to complete three semantic differential measures aimed at assessing their

opinions about men of different height. The results were rather striking in that the female subjects did in fact have remarkably distinct and unequivocal opinions about the characteristics associated with men of different height. In this study, men of short height were consistently seen in pejorative terms while the men of average and tall height were seen in consistently positive terms. An analysis of the items reveals that men of short height were rated as more immature, inhibited, conforming, feminine, passive, incomplete, pessimistic, withdrawn, and less capable.

When the data were analyzed along the lines of the three factor scores as outlined in Osgood, Suci, and Tannenbaum's (1957) original work, the results were analogous to the results of the item-by-item analysis. Men of short height were viewed in a significantly less positive light on the Evaluation factor. On the Potency factor, men of tall height were seen as most potent, men of average height were seen as significantly less potent, and men of short height were seen as the least potent. On the Activity factor, men of short height were seen as less active or more passive than their taller counterparts.

The results of Martel's (1984) study strongly indicated that stereotyping and social discrimination based exclusively on the factor of height does indeed exist.

The notion that a relationship exists between height and marital choice is a long-standing one. As early as 1903, Pearson and Lee concluded from their research that there was strong evidence that sexual selection was based on stature. Beigel (1954), in his classic study

of body height and mate selection, found that in most of the 192 couples that he studied, the men were taller than the women. In his survey, subjects between 16 and 27 years of age were asked to describe the characteristics of a desirable male and females without being asked, "an unexpected number of replies referred to body height" (p. 258), as one of the important physical characteristics.

More recently Gillis (1980) investigated the male-taller norm as it applied to mate selection. He examined the height recorded on bank account applications for 98 married couples to find that the chances of the male being shorter than the female spouse was 1 in 720 and that this was far less than the statistical expectancy of 3.4 per hundred.

In fact, the belief that the male must be taller than the female partner is so inflexible that in one study investigating the importance of physical attractiveness in dating behavior (Rothman, 1974) dates were randomly assigned to the subjects with one and only one limitation; "a man was never assigned to a date taller than himself" (p. 510). When it did occur that the computer assigned a taller female date to a shorter male, the IBM card was placed back into the deck and the next card selected.

The manner in which this research study was handled points to the fact that there are implicit rules regarding height as it applies to male-female relationships. The stricture regarding height is so prevalent as to be totally taken for granted.

It becomes evident that the short male's relationships with women will be profoundly affected by his stature. "No adult is more painfully aware of who's bigger than a smaller man competing with a larger one for the attention of a woman" (Keyes, 1980, p. 147). Moreover, the influence of height in human relationships is apparently not limited to between sex interaction.

Berkowitz (1969) studied the friendship choices of 1763 undergraduate male subjects. The subjects listed their own heights and then the perceived heights of their three closest friends. Among the friends that he studied, the average difference between the two parties was only 2.76 inches. This reflects a smaller difference than would have occurred in a random pairing of the subjects.

The literature on this topic is unequivocal. Whether or not one is physically attractive is important in many life areas. People do make assumptions regarding one's behavior and personality traits based on the way one looks. Most importantly for this review, it is evident that shorter men are not viewed as being as attractive and that they may have restricted dating, marital, and friendship choices. The short male appears to be the recipient of negatively valenced stereotypes and he is subject to social discrimination which may be based exclusively on the fact that he is significantly shorter than his male peers. Although the complexity of the relationship between height and attractiveness is not fully understood, it is a phenomenon that clearly exists.

1.6 THE SOCIAL CONTEXT

A. The Social Sphere

Asked if he was self-conscious about his height, the 5'6" Dick Cavett replied: No, but I'm self-conscious about other people's

Quoted in Keyes, The Height of Your Life, 1980

Meyerson (1963), in writing about physical disability said:

It is clear that the handicap is not in the body nor in the person, but is a function of the society in which the person lives (p.13)

It is an essential fact of life that the way one feels about his height largely depends on one's height relative to others. This applies to tall as well as short individuals. For example, "Thomas Wolfe, the 6'6 " writer, used to say that he never felt tall when alone in his apartment; only when he stepped outside was he reminded (incessantly) by others of how big he was relative to them" (Keyes, 1980, p. 51). It is within the social context that an individual "learns" that his body is different. In fact, one may experience one's own height differently depending on who one is standing next to. Fisher (1973) makes the point that,

We only judge our bodies in a most relative way. We have all had the experience of feeling altered in body size as the result of interacting with someone of unusual body dimensions or special significance to us. If you stand next to a very short person you will feel tall, and in the presence of another who is of extreme height, you suddenly become conscious of your smallness (p. 11)

Ziller (1973) notes that the individual has recourse to "Paired-comparisons" of the self and significant others. "That is, self-evaluation evolves in terms of social reality. Self-evaluation then emerges within a social frame of reference (p. 84)". This is a most critical point in the understanding of the psychosocial implications of short stance in males.

One of the first researchers to specifically address this point was Schilder (1935) in his book The Image and Appearance of the Human Body. In the discussion about body image he states that,

our body is not isolated. A body is necessarily a body among other bodies. We must have others about us. There is no sense in the word "ego" when there is not an "other".
(p. 281)

In his later work, Schilder (1951) reinforces this point by defining the I-Thou relation more sharply.

We experience the body image of others. Experience of our body image and experience of the bodies of others are closely interwoven with each other. Just as our emotions and actions are inseparable from the body image, the emotions and actions of others are inseparable from their bodies (p. 16).

One invests one's body with libidinous energy. The interest that others show in an individual's body contributes to the manner in which this libidinous drive is developed and then cathected. That is, how attractive one feels depends, to a large extent, on how attractive others think we are. Schilder (1951) advises that others may show their interest by actions, words or attitudes,

But what persons around us do with their bodies is also of enormous importance. Here is the first sign that the body image is built up of social contacts (p. 137)

If an individual "learns" that he has a defective body, the social context in which he exists may cause him distress. As Fisher (1973) writes,

the distress stirred up in someone who feels he has a defective body when he finds himself interacting with a person whose body he perceives as not being defective (and therefore presumably superior to his) is profound indeed. (p. 82)

Fisher (1973) believes that the individual who perceives his own body to be defective will experience the presence of a sound body as a "reproach to his inferior state, and he becomes disturbed" (p. 82).

The literature points to the strong possibility that just such a process is what the short male may experience throughout his life cycle.

B. The Impact of Body Stereotyping

If in fact there is a relationship between one's physical attributes and one's personality and behavior, one plausible explanation comes from the literature on the phenomenon of body stereotyping. As early as 1954 Brodsky demonstrated that stereotypes exist within our culture regarding the personality traits expected of individuals with different types of physiques. There are very pronounced opinions regarding the supposed relationship between body characteristics and personality (Lerner, 1969, 1972; Staffieri, 1967) and generally speaking, the research evidence supports the hypothesis that such a relationship exists (Gascaly, 1979; Yates and Taylor, 1978; Dion, Berscheid, and Wal-

ston, 1972; Wallace, 1941). It is thought that beliefs regarding the relationship between body characteristics and personality traits are absorbed early in one's development. Staffieri (1967) for example, asked 90 male children between the ages of six and ten to assign thirty-nine adjectives of various behavior-personality traits to silhouettes which represented extreme endomorph, mesomorph, and ectomorph body types. The results clearly indicated that a common stereotype of personality-behavior traits associated with various body types existed, even at this young age. The significant adjectives assigned to the mesomorph image were favorable while the adjectives assigned to the endomorphy and ectomorphy were unfavorable, emphasizing socially aggressive and submissive behavior respectively. Moreover, the subjects showed a clear preference to look like the mesomorph image. The results point to the fact that the masculine ideal is internalized well before adolescence.

Staffieri's (1967) results were confirmed by Lerner and Korn who used three age groups of males (5-6 yr., 14-15 yr., 19-20 yr.) in a study of body stereotype development. The results demonstrated that all of the age groupings held a more favorable view toward the mesomorph body-build. In fact there may be some reality to the stereotypes. Biller (1968) noted that, according to teacher ratings, kindergarten boys who were tall and broad tended to be particularly masculine in interpersonal situations. Yates and Taylor (1978) investigated a group of subjects' knowledge about and preference for Sheldon's three primary physiques. The results confirmed the relationship between degree of stereotyping and cultural preference for the meso-

morphic body type. These authors believed that their results were congruent with Sheldon's original hypothesis that somatotype personality correlations were due to stereotyping.

There is evidence that socially desirable personality traits are attributed to those with a particular body-build. For example, those who are seen as being "physically attractive" (Dion, Berscheid and Walston, 1972) are viewed as having more desirable personality traits.

In only three studies was the factor of height examined. Brunswick (1939) had students look at a series of human figure drawings and asked them to indicate which of the drawing possessed more positive qualities. He found that the students found the taller figures as significantly more "intelligent" than the shorter figures. Wallace (1941) asked seventy college students to judge photographs for such qualities as intelligence, energy, good-lookingness, happiness, and likability. He found that tallness tended to elicit higher ratings from subjects especially regarding good-lookingness and likability. These findings were confirmed in a more recent study of physical characteristics and the perception of masculine traits (Elman, 1977). Under the guise of judging an essay submitted to a writing contest, 48 male and 48 female college students made trait ratings of a male college student based on information from a "contest application form. The target person's height was given either as 5 ft. 4 inches or 6 ft. 4 inches. They found that, "when presented as tall, the target person was rated as more extraverted, and as more attractive than when presented as short. (p. 158)"

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Gascaly (1979) was the only study to be found that attended to the interaction effect of height and other body-type variables. In studying the male physique and behavioral expectancies, he had 100 men and women undergraduates attribute 24 personality traits to one of six male body-types which were varied by height (tall or short). As in the earlier research, the mesomorph body-type was associated with more socially desirable personality traits than any other. Most important for this review, it was found that "the added dimension of height provided sufficient differentiation of body type to alter significantly behavioral expectancies" (p. 97). In this case, height emphasized the extreme characteristics of the generally favorable or negative patterns attributed to the body builds. The author discusses the ramifications of his findings for a male's personality development:

Since an individual's physique is generally quite stable, it seems reasonable to assume that these stereotypic attributes associated with height (X) body-build combinations are communicated to the individual in terms of both expected behaviors and societal pressure to conform to its beliefs. If over a lifetime, an individual gradually succumbs to these societal expectations, the stereotype is perpetuated. Additionally, the male whose body type does not conform to the traditional image of the ideal male, that of the tall mesomorph, may face severe difficulty in accepting himself and having others accept him as truly masculine and competent in the male role (p. 101).

Women it seems, share the same values about body-build personality stereotyping. As mentioned in a previous section of this review, Martel (1984) found that college age females possess strong and consistently negative attitudes about men of short height. In another study aimed at assessing female stereotypes of male body-build/personality relationships, Lerner (1969) found that females from late ado-

lescence to middle age hold a common stereotype of male body-build/ personality relationships, consistently favoring the large mesomorphic child. It was his opinion that these findings strongly supported the social-inculcation hypothesis which states that individuals in the child's socializing environment do stereotypically associate various behavior-personality traits with specific body builds and this association is communicated in subtle yet powerful and longlasting ways.

C. Height and Power

Duke was six-four, but he wore four inch lifts and a ten-gallon hat. He had a station wagon modified to fit all that paraphernalia. He even had the overheads raised on his boats so that he would walk through the doorways with the lifts on. And he was bigger than them all.

Robert Mitchum Discussing John Wayne, Esquire magazine, Feb. 1983, p. 52.

We short people think we're of average height and people taller than us above average, says 5' 5" physician George Shorago of South San Francisco Hospital. He adds, "In medical school I sometimes had to stand on a stool when I operated. It was tough on me until I became chief resident. Then everybody had to bend down to accomodate me.

U.S. News and World Report,
March 28, 1977, p. 63.

As Kurda (1975) reminds us in his book on power, "Height means something to people, and its not wise to forget it." We exist in a social context in which one's body is judged in comparison with other bodies. This notion of social comparison has been commented on in the previous section of this review. Keyes (1980) postulates that height is seen (a) relatively (b) by level of eye contact, and (c) in equation with power. All three of these components are germane to understanding the psychology of the short male. It has been pointed out that a "primitive evaluation" (Fisher, 1970) process goes on between individuals that may be based solely on height. Biologist Stephen Jay Gould states that among both men and animals "gaze behavior" is an im-

portant means of sorting out who stands where. "In essence, it is important whether you are looking up or looking down (in Keyes, p. 52, 1980). This perspective translates into greater or lesser social power. A workable definition of social power is offered by Caplan (1981):

Social power is the ability to move others spatially or otherwise and to induce others to defer to one's wishes....
(p. 71)

There is research to suggest that short males have considerably less social power than their taller counterparts. As already noted in a previous section, individuals thought to be more important are judged to be taller. It seems to be a natural tendency to associate power with larger size. As Keyes (1980) points out

it is a basic tenet of the psychology of perception that size is associated with value. Whatever our mind judges as important our eye will judge large. And power is among our ultimate values. (p. 57)

In one of the earliest research efforts addressing this supposition, Eisenberg (1937) wrote in Factors Related to Feelings of dominance, that physical factors "such as height and weight play some role in determining a boy's dominance and status among his fellows" (p. 90). At that time the question of "how much" could not be ascertained.

The role of height in determining dominance and status is so important that it was recently mentioned that as one of the seven rules for choosing a vice-presidential candidate of the United States. ABC news correspondent Roger Mudd reported:

Rule number three: go short, pick a vice president shorter than you are. If you can't do that, make sure to stand at

least ten feet away from him (ABC evening news, May 24, 1984).

It is of more than passing interest to note that one of the questions on the Wechsler Intelligence Scale for Children-Revised, asks "What's the thing to do if a boy much smaller than yourself starts a fight with you?" (Wechsler, 1974) The correct (two point) answer is "just walk away...Don't hit him, find out what's the matter...I wouldn't fight with him...ignore him... ." The correct (two point) answer negates the short boy's right to take an aggressive stance. The short male does not even warrant the option of a fight if he desires this choice. Hence, being comfortable with power is not something that easily develops for the short male. In the case of the short male, "abusing power, overexerting it - simply not knowing how to be graceful with power - is a potential problem..." (Keyes, p. 106, 1980) In the only study to date that addresses this issue, Portnoy (1972) studied how height entered into the power relationship between people. He brought together people of short and tall height, designed a task, and watched their interaction. He found that the short males conformed much less when they experienced pressure from the tall males. He concluded that smaller people experience a feeling of jeopardy in the presence of taller people. "I don't think it's a threat of bodily injury as such," he said, "just a general sense of threat to well-being" (quoted in Keyes, 1980, p. 63).

Fisher (1973) had predicted just that; an individual who regards his body or parts of it as inferior will be particularly vulnerable to a sense of intimidation. He believes that individuals will develop

defensive styles and attempt to create an environment that they will experience as safe.

Such defensive styles may develop because of the difficulty the short male has in negotiating situations in which the power dimension is prevalent. If in fact aggressive acting out is "strongly associated with the phallic image (Fisher, p. 58, 1973)" then this presents a dilemma for the short male.

Hartnett (1974) examined the hypothesis that body height determines the amount of personal space given to an individual. Within an experimental situation, he had 41 male and 43 female subjects approach either a tall or short person with instructions to stop when they felt "uncomfortable." Their findings revealed that the subjects did stop their approaches farther from the tall person as was predicted. Hartnett reported that,

both males and females maintain twice as much distance between themselves and the tall object person than between themselves and the short object person. This is most apparent in the standing position where the mean space for subjects were 9.8 inches and 22.7 inches for the short and tall subjects respectively (p. 134).

The authors conclude that height is a major determinant of the amount of personal space accorded to an individual.

Bailey (1976) studied the relationship between body size and implied threat. He found a significant main effect of body size across the rating scales attesting to the powerful perceptual impact of the large object person. He also found the largest perceptual differences for large object versus small object occurred under the strongest threat condition. He concluded that,

For whatever reasons, it seems clear that physical size and being 'smaller than' or 'larger than' played major roles in the subject-object interactions in the present study (p. 228)

That is, as Keyes (1980) postulated, height is seen only within a relative and social context and it is seen in equation with power. It is perhaps the element of the "primitive evaluation" (Fisher, 1970) which is operating, albeit on a less than fully conscious level of awareness.

In another study, Caplan (1981) tested two predictions regarding the relationship between height and social power: a) When given a choice between violating a tall or short person's space, subjects will intrude more often into the short person's space. The second hypothesis was that b) females in comparison to males, given a choice of violating the space of a tall or short person will more frequently intrude into the space of a short person. What they found was that the short person's space was violated more frequently and that the females are less likely to invade the tall person's space than were the males. They concluded that,

The present study, by using an experimental situation which contained a relatively small degree of threat provided evidence that height alone is a sufficiently robust characteristic to affect interpersonal spacing (p. 170).

The research clearly indicates that the amount of social power one enjoys may be dependent, at least in part, upon one's height. Size and power within western culture appears to be almost linearly related. Fisher (1973) succinctly articulates the social power dynamic as it related to the function of height:

If someone is unmistakably shorter than average, almost everyone has the right to feel bigger and to entertain a sense of superiority by laughing 'down' (p. 189)

In a related area of research, it has been hypothesized that height and ascribed status are positively correlated. Naturally, power and ascribed status go hand in glove. The research overwhelmingly supports this hypothesis that height is associated with status and that people tend to assume that individuals of higher status are also taller. Over sixty years ago Thorndike (1920) noted that taller individuals benefit from the "Halo effect". That is, others will attribute positive personality characteristics to them. Gillis (1982) describes this situation as:

...a problem, a problem of prejudice, if what they think of us depends on how tall we are. That, unfortunately, is what the research literature shows. (p.61)

Dannenmaier and Thumin (1964) studied whether perceptual judgments of height would be influenced by the authority status of the person being evaluated. They hypothesized a linear relationship between status and perceived height. Using female nursing students they had four individuals of different authority levels represented; an assistant director, a course instructor, a class president, and a fellow student. The results confirmed their hypothesis: there was an overestimation of the authority figure's height and an underestimation of the student's height.

The Dannenmaier and Thumin (1964) study, while an important research contribution, did not rule a competing hypothesis put forward by Wilson (1968). Wilson (1968) pointed out that "the systematic ov-

erestimation and underestimation could be related not to status but to general body somatypes, facial characteristics, personality attributes, or to numerous unknown and uncontrolled for aspects of the authority figures used (p. 97)". To correct for this bias, he used only a single stimulus figure who was unknown to the subjects. By doing this, it was hypothesized that an increase in status would be related to a tendency to increase the height of the stimulus figure. Five groups of students had the same individual's academic status described at five different levels. As in Dannenmaier and Thumin's (1968) study, the height of the individual varied in direct proportion to the increase in status thus replicating Dannenmaier and Thumin's (1964) results.

All in all, the research solidly demonstrates that greater height is positively related to greater perceived power and social status. The taller individual is able to attain a more commanding position in the eyes of others, benefiting from the positive attributions based on his height. Looking once again at a definition of social power:

One who has the ability to move others spatially or otherwise and to induce others to defer to one's wishes. (Caplan, 1981, p. 171)

The possible psychosocial implications of short stature in males becomes clear. He is the recipient of attributions of lessor power, lessor heterosexual attractiveness, less valued personality qualities, and lower ascribed status.

1.7 SHORT STATURE IN MALES AND DISCRIMINATION

The most frequent question I'm asked is,
'How do I get promoted?' My answer:
'The easiest way is to be born right and
born tall.'

Gerard Roche, President
Heidrick and Struggles, Inc.
In The American Way, Jan, 1978,
p. 49

The placement director for a big midwestern university overheard one corporate recruiter say to another "I wonder if so-and-so's ready for management? He's only five-foot-four.

Short People -- Are They Being
Discriminated Against?
U.S. News and World Report,
March 28, 1977, pp. 68

Why is it that a space for your height is in third or fourth position on every application blank in the world? What difference does it make in getting into medical school or going to work for a corporation?"

Short Workers of the World Unite!
Deck, L. Psychology Today, 1971

The literature reviewed so far makes it clear that "there is a pervasive social attitude which associates tallness with positive psychological characteristics and assigns negative attributes to shortness" (Stabler, 1980, p. 743). Discrimination against short males, although often subtle, remains a powerful factor in their lives. As pointed out in a previous section, discrimination against those of short stature apparently begins in early childhood. It has been noted that society positively frames an identity for the short female by

labeling them as "cute" or "dainty" while the short boy is just plain "short" (Finch, 1978). This discriminatory posture makes its way into all important life spheres.

There is evidence that taller individuals are routinely favored in both social and economic endeavors (Keyes, 1980; Graziano, 1978; U.S. News and World Report, 1977; Feldman, 1975; Christian Science Monitor, 1977) although there is little public acknowledgement of this fact. In the economic realm for example, not only do shorter men receive lower salaries, but they are less likely to be hired in the first place in spite of equal qualifications (Graziano, 1978). In a survey at the University of Pittsburgh, graduating seniors who were 6'2" or taller received a starting salary 12.4 percent higher than graduates who were under six feet (Deck, 1971).

Being shorter than average may well be a greater deficit than being substantially overweight because one's weight can be changed but "if you're short, you're short" (Keyes, 1980 p.183). Kurtz (1969) asked recruiters to make a hypothetical hiring decision between two equally qualified candidates who differed in height. The height bias in favor of the taller candidate emerged. In this study seventy-two percent said that they would hire the taller one.

One of the few open admissions of height bias was made by John Kenneth Galbraith (U.S. News and World Report, March 28, 1977). He described the favored treatment of the taller individuals as "one of the most blatant and forgiven prejudices in our society" (p. 22). In this interview, he goes on to describe a conversation that he'd had with

General Charles de Galle regarding tallness. Galbraith apparently believes that "We tall men, being higher than anybody else are much more visible and thus more closely watched. Therefore, it follows that our behavior is naturally superior. So the world instinctively and rightly trusts tall men" (p. 22).

Discrimination against the short male is most often more subtle than the above quote indicates. In fact, the discrimination is more often what Keyes (1980) calls "like fighting a ghost." The reason for this is two-fold: either the awareness regarding discrimination is not in the consciousness of one or both individuals or verbalization of the discrimination is suppressed. The result is that the short male "feels" that something is not quite right, but he cannot pin it down. He knows that this discrimination is based on the social feedback that he does not look quite right; that he falls significantly short of the cultural ideal for height. Yet, one's appearance is ostensibly relatively unimportant. The research on the topic points to the opposite conclusion.

1.8 SUMMARY

The extensive amount and diversity of literature reviewed here yields several important conclusions. It is clear that very strong opinions exist within both the scientific and lay community regarding the relationship between height, behavior, and personality. A person's salient physical characteristics, of which height is one, do in

fact exert a powerful influence on both the way others perceive one, and in turn, the way one thinks and feels about oneself.

Males it seems, are particularly concerned about body characteristics associated with size, strength and overall perceptual impact. Males strongly desire and strive for the attainment of the six-foot two-inch cultural ideal. The research confirms the belief that large body size in males is associated with positive body cathexis. In fact, an almost perfect linear relationship is found between satisfaction with one's height and its closeness to the cultural ideal. Ultimately, the research points to the conclusion that males do indeed value bigness of body parts and that the classic large, mesomorphic build symbolizes masculinity within a Western culture. A male's sense of self and masculinity is, to a large degree, interwoven with the concept of "bigness".

The research addressing the question of self-concept and body cathexis indicates that negative body feelings are associated with feelings of insecurity involving the self. That is, it seems that the way one feels about one's body has a substantial effect on the way one feels about oneself.

Perhaps as important in this complex equation is the point that the way other people feel about one's body affects one's own perceptions of self-worth and self-esteem.

While there has not been much literature assessing the developmental implications of short stature in males, more has been written on

the developmental implications of early versus late maturation. since short stature has been found to be correlated with late maturation it was felt that this literature may be useful in understanding the possible developmental impact of short stature. The late maturers were found to be consistently less well adjusted, less involved, with poorer social-behavioral skills.

The research that did assess the relationship between height and personality traits points to the possibility that there may be a relationship between large physical size and positively valued behavioral traits. Certainly, there are pejorative stereotypes which appear to be absorbed by children as early as age six. These stereotypes may be absorbed by the short male as well, thereby lending credence to the stereotypes. If the short male learns to perceive his own body as defective, the social milieu will only serve to reinforce his sense of inadequacy. Lerner's (1969) "Social incultation" model seems a parsimonious explanation of the phenomena.

The literature suggests that short stature in males may lead to a characteristic defensive style. This style may take the form of excessive reliance on rational and analytical skills with a parallel devaluation of the "body world". In order to satisfy the need to express anger and aggressive impulses without the fear of retribution, the short male develops a well-differentiated sense of humor. This characteristic style may also serve as a means of gaining peer group acceptance. That is, while not being able to compete on an equal physical basis, the short male may be admitted to the peer-group be-

cause of his better than average cognitive skills or his mascot potential.

For the short male, this entails acceptance of lesser social power. Research solidly demonstrates that greater height is positively related to greater social power and perceived social status. The taller individual is able to attain a more commanding position among others and he benefits from the positive attributions associated with his height.

It also becomes clear to the short male as he approaches adolescence that he is viewed as less physically attractive. This in turn leads to limited dating, marital, and friendship choices. He is the recipient of social discrimination and this discrimination spreads to a broader range of situations as he gets older.

When the available literature on the possible developmental, personality and social consequences of short stature in males is seen in toto, it is clear that the possibility of profound psychosocial implication exists.

Chapter II

HYPOTHESIS AND PREDICTIONS

Hypothesis:

The hypothesis postulated in this study is that physical stature in males is significantly related to an individual's self-perceptions, self-concept, body satisfaction, and feelings of psychological security. It is anticipated that significant differences on these dimensions will be found among the short, average height, and tall caucasian college-age males.

Prediction 1:

It is predicted that short males will be significantly less satisfied with the overall appearance of their bodies than either of the other two height groups. The construct of body satisfaction will be measured by the Secord and Jourard Body Cathexis Scale.

Prediction 2:

It is predicted that short males will demonstrate a less favorable self-concept. The construct of self-concept will be measured by the Activity Vector Analysis.

Prediction 3:

It is further predicted that short males will report experiencing greater psychological insecurity than their taller counterparts. The construct of psychological security will be measured by the Maslow Security-Insecurity Scale.

Prediction 4:

The self-reported thoughts about the impact of height in an individual's daily life will be significantly more pronounced for the short males than for either of the other two height groups. It is also predicted that this group will report experiencing less comfort in social situations. This will be measured by a questionnaire specifically designed for this purpose.

Prediction 5:

It is also predicted that the sample as a whole will attribute negatively valenced and less socially valued personality traits and personal qualities to men of Short Height than to either the men of average or tall height.

Chapter III

METHOD

3.1 PROCEDURE

Instructors of large introductory college psychology courses at a state university in New England were contacted regarding access to their course with the purpose of administering the study measures. Access was granted for two such classes.

At this particular university, it is the current practice within the department of psychology to ask students to participate in projects in return for extra credit points. Students are free to participate in any number of projects or none at all if they so desire. The subjects in this study were volunteers who received extra credit points in return for participation.

In the first class it was announced by the instructor that specific out-of-class times would be arranged for students to voluntarily participate in this study. As a reward for participation extra-credit points toward their final course grade would be given. This was one of several opportunities throughout the semester for the students to receive such extra-credit points. The voluntary nature of participation was emphasized.

The administration of the measures was done in groups of ten to thirty students. The measures were accompanied by a cover sheet explaining the general nature of the study while also emphasizing the confidentiality of the data and the anonymity of participants. A copy of this cover sheet is in Appendix B. This cover sheet was read aloud by the proctor and any concerns, questions, or issues were addressed. After participants completed the measures, a debriefing and question-answer period was conducted.

In the second introductory course, the instructor allowed access to his course in exchange for the investigator delivering a lecture on the topic of this study. In this case, the entire class was free to participate with extra-credit points as their reward for participation. It was emphasized by the investigator that completion of the measures was not a requirement of the course. As was done previously, each packet of measures was accompanied by the cover sheet explaining the general nature of the study. Once again, it was emphasized that the data would be treated as confidential and that anonymity would be assured. In this class, a six-digit code number was used for each subject so as to collect test-retest reliability data. The contents of the cover letter was read aloud and any questions or concerns were addressed.

After the measures were completed, a debriefing and question-answer period was conducted. A lecture followed the question and answer period.

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For both of these administrations, subject data was partitioned on an post-hoc basis according to height.

The data collected from the two introductory psychology courses did not provide a sufficient number of subjects to fill the "short male" cell. In order to fill this cell, advertisements aimed at the recruitment of subjects under 5'5" were placed in local college newspapers. A copy of this advertisement is in Appendix A.

In this instance, groups of 3-10 students were administered the measures at any one time. As was done previously, the cover sheet was read aloud and care was taken to assure that each participant understood that the data would be treated as confidential and that anonymity would be protected. After the subjects completed the measures, a debriefing and question-answer period was conducted. Under all three conditions, the investigator was present throughout the administration of the measures.

The data were divided on a post-hoc basis into three groups based on height. Determination for inclusion into one of these three groups was based on data from the National Health Survey for the years 1971-1974 (Abraham, S.A.; C. Johnson, and M. Najjar, 1979) and the Statistical Abstract of the United States (1982).

These reports contain data on the heights of caucasian males according to age groups. Within the 18-24 year old range, it is estimated that 3.7% of caucasian males are under 5'5" and that 13% of caucasian males are over 6'1" tall. The mean height for caucasian males in the 18-24 year old range is 5'9" (standard deviation = 2.8).

For the purpose of this study the height groups are as follows: (1) short subjects are 5'5 1/2" or shorter, (2) average height subjects are between 5'8"-5'10 1/2" tall and (3) tall subjects are 6' or taller. All three of these height category designations are within one standard deviation of the National Health Survey statistics. In order to ensure that categories would be reasonably distinct, data collected that did not fit the three height categories were not included in the study.

3.2 SUBJECTS

The subjects in this study are all caucasian males. It is quite possible that ethnic variations exist regarding the ways in which short males behave and are treated by others. There are also probable differences between social classes as well. However, in order to achieve a sharp focus on the topic and to maximize internal validity, it was felt that a homogenous group would minimize possible confounding of results due to ethnicity and social class.

The demographic data that follows are collapsed in two different ways. In the first case demographic data is partitioned between the three height groups (short height = group 1, average height = group 2, tall height = group 3). In the second instance data is partitioned according to the three schools which were used in this study.

3.3 DEMOGRAPHIC DATA FOR SHORT, AVERAGE AND TALL SUBJECT GROUPS

A. Age

The age range of the subjects in this study is from 17-22. As seen in Table 2, ANOVA results were significant [$F(2,116)=6.93, p< .01$] and the Tukey Multiple Range Test (Table 7) indicated that there is a statistically significant difference in the mean age of group one (short subjects) as compared to the other two groups but this difference is slight, reflecting little actual importance. As seen in Table 1, the mean age for group 1 is 19.8 (SD=1.5), for group 2 (average Height subjects) it is 19.2 (SD=1.5), and for group 3 (tall subjects) 18.6 (SD=1.2). That is, the mean age for all three height groups is under twenty years of age, yielding a rather tight cluster of peer-age subjects. These results, as well as the other significant differences between groups may be seen in table 1 .

B. Income

The mean family income for the entire sample is between \$20,000 and \$30,000 per year. As seen in Table 5, the ANOVA results were significant [$F(2,128)=4.59, p< .01$]. The Tukey (HSD) follow-up test results (Table 10) show that in this sample the short subjects have family income that is higher than the average height or tall subjects. This may be explained by the fact that fifty percent of the short subject sample was drawn from an ivy league college, while the remainder of the subject pool was drawn from state universities.

Seventy-three percent of the families of the short subjects earned \$30,000(+) per year, while 59% of the families of the tall subjects and 40% of the families of average height subjects were in this income range.

C. Grade-Point Average

As seen in Table 6, a significant difference among the three groups was found with regard to grade point average [$F(2,122)=11.84$, $p < .01$]. A Tukey-HSD multiple Range test (Table 11) revealed that the short subjects earned significantly higher grades ($p < .01$) than either of the other two groups (short subjects: 3.67, average subjects: 2.9, tall subjects: 2.7 on a 4.0 scale). The tall and average height subjects did not significantly differ. This difference may once again be attributed to the fact that a large percentage of the short subjects attended an ivy league institution whereas members of the other two groups did not.

In this sample, 23.5% of the short subjects reported having grade point averages within the range of 3.6 to 4.0, which was significantly higher than that of the other two groups.

D. Year in School

There were no significant differences among the three groups regarding year in school, with 68% of the sample in the first two years of college.

E. Marital Status

No significant differences were found among groups based on marital status. Over 92% of the short subjects, 95% of the average height subjects, and 95% of the tall subjects reported being single.

F. Religion

Differences between the three groups regarding religion were found. The short subjects reported being 43.4% jewish as compared to only 10% and 5% for average height and tall subjects respectively. In contrast, the average height and tall subjects report being predominantly catholic (77.5% and 70% respectively).

G. Race

This study included only caucasian males. Hence, 100% of the sample is caucasian.

H. Medical Problems

Subjects who responded that they did have "significant medical problems" were excluded from the study. All of the students in this study report being healthy with no significant medical problems

I. Significant Physical Abnormalities

Subjects who responded that they did have "significant physical abnormalities" were excluded from the study.

J. Participation in Sports

The overwhelming majority of subjects (82%) reported regular (minimum of approximately one time per week) participation in sports. While the short subjects did report an apparent lower frequency of participation (75.7%), it did not attain statistical significance.

K. Weight

As expected, the three height groups differed significantly in body weight [$F(2,124)=63.02$, $p<.01$]. The mean weight for short subjects was 137 pounds ($SD=16.5$), the average height subjects weighed 151 pounds ($SD=16.1$), and the tall subjects weighed 180 pounds ($SD=22$). All three of the height groups are within the average range of weight for their heights.

Analysis of the demographic data from the three height groups reveals that the three groups are all caucasian males of similar age, representing a tight cluster of peer age subjects.

The groups do not significantly differ in year of college and they are mostly unmarried (92+%). They have no significant medical problems in significant abnormalities and they participate about equally in sports related activities. The three height groups are all within the average weight range for their height.

The short subjects are academically superior students, come from families that have higher incomes, and have a higher Jewish composition. Significant differences are summarized in Table 1. ANOVA's and Tukey (HSD) follow-up tests are in Table 2 - Table 11.

Table 1

SIGNIFICANT DIFFERENCES IN DEMOGRAPHIC DATA COMPARING SHORT, AVERAGE AND TALL SUBJECT GROUPS: THE MEANS AND STANDARD DEVIATIONS

	<u>Short(1)</u>		<u>Average(2)</u>		<u>Tall(3)</u>	
	<u>M</u>	<u>SD</u> (<u>n=46</u>)	<u>M</u>	<u>SD</u> (<u>n=36</u>)	<u>M</u>	<u>SD</u> (<u>n=37</u>)
Age	19.8	1.5	19.3	1.5	18.6	1.2
Height	5.4	.097 (<u>n=53</u>)	5.8	.074 (<u>n=40</u>)	6.1	.18 (<u>n=40</u>)
Weight	137.	16.5 (<u>n=50</u>)	151.	16.1 (<u>n=37</u>)	180.	22 (<u>n=40</u>)
Family Income	3.67	.58 (<u>n=52</u>)	3.22	.76 (<u>n=40</u>)	3.44	.78 (<u>n=39</u>)
Grade Point Average	3.67	1.01 (<u>n=51</u>)	2.86	.96 (<u>n=36</u>)	2.71	1.04 (<u>n=38</u>)

Table 2

ANOVA FOR AGE

Source	SS	df	MS	F
Height Group	27.65	2	13.82	6.93**
Error	258.93	116	1.99	
Total	258.93	118		

**p<.01

Table 3

ANOVA FOR HEIGHT

Source	SS	df	MS	F
Height Group	12.53	2	6.26	394.16**
Error	2.07	130	.0159	
Total	14.60	132		

**p<.01

Table 4

ANOVA FOR WEIGHT

Source	SS	df	MS	F
Height Group	42264.43	2	21132.21	63.0**
Error	41580.41	124	335.33	
Total	83844.84	126		

**p<.01

Table 5

ANOVA FOR FAMILY INCOME

Source	SS	df	MS	F
Height Group	4.588	2	2.294	4.59**
Error	64.007	128	.5001	
Total	68.595	130		

**p<.01

Table 6

ANOVA FOR GRADE-POINT AVERAGE

Source	SS	df	MS	F
Height Group	23.95	2	11.98	11.836**
Error	123.45	122	1.01	
Total	147.40			

**p<.01

Table 7

TUKEY-HSD MULTIPLE RANGE TEST FOR AGE

Mean	Group	3	2	1
18.62	Group 3			
19.25	Group 2			Grp 1 > Grp 3
19.78	Group 1	*		

*p<.05

Table 8

TUKEY-HSD MULTIPLE RANGE TEST FOR HEIGHT

Mean	Group	1	2	3	
5.39	Group 1				
5.77	Group 2	*			all pairwise differences significant
6.12	Group 3	*	*		

*p<.05					

Table 9

TUKEY-HSD MULTIPLE RANGE TEST FOR WEIGHT

Mean	Group	1	2	3	
137.06	Group 1				all pairwise differences significant
151.24	Group 2	*			
180.33	Group 3	*	*		
<hr/>					
*p<.05					

Table 10

TUKEY-HSD MULTIPLE RANGE TEST FOR FAMILY INCOME

Mean	Group	2	3	1	
3.23	Group 2				
5.44	Group 3				Grp 1 > Grp 2
3.67	Group 1	*			

*p<.05					

Table 11

TUKEY-HSD MULTIPLE RANGE TEST FOR GRADE-POINT AVERAGE

Mean	Group	3	2	1
2.71	Group 3			
2.86	Group 2			Grp 1 > Grp 2
3.67	Group 1	*	*	Grp 1 > Grp 3

*p<.05				

3.4 SIGNIFICANT DIFFERENCES IN DEMOGRAPHIC DATA AMONG THE THREE SCHOOLS

As indicated in the previous section, subjects from three universities were used in this study. Two of the universities were state universities while one was a member of the ivy league. School number three is the Ivy League institution.

There were some significant differences between the three samples that requires some exploration and explanation. These significant differences may be seen in Table 12

A. Age

The ANOVA results for age were significant [$F(2,134)=7.62$, $p<.01$], as seen in Table 13. The Tukey (HSD) follow-up test (Table 17) shows that the subjects from school 2 are somewhat older than the subjects from schools 1 and 3. The subjects from school 1 are the youngest ($M=18.9$) as they were all part of an introductory psychology course. The subjects from schools 2 and 3 were recruited from campus newspaper

advertisements. Since school 2 is a state school and school 3 is an ivy league school, a greater age range of respondents is evident. However, the mean age for each of the three schools (School #1 = 18.9, School #2 = 20.2, School #3 = 19.5) represents a "peer cluster" rendering the statistical significance of little importance.

B. Height

The ANOVA for height was significant [$F(2,149)=90.59$, $p<.01$], as seen in Table 14 The subjects from school 1 are significantly taller than the subjects from schools 2 and 3 ($p<.01$). This difference reflects the fact that all of the average height and tall subjects were drawn from school 1 while most of the short subjects were drawn from schools 2 and 3. These results are contained in Table 18

C. Weight

The ANOVA for weight was significant [$F(2,143)=29.29$, $p<.01$], as seen in Table 15 Weight was positively correlated with height ($r=.65$), so that the taller subjects of school 1 who represent mostly average or tall subjects, weigh significantly more than the subjects from schools 2 or 3 who are all short subjects. These results are seen in Table 19

D. Income

The ANOVA for income was significant [$F(2,147)=6.28$, $p<.01$], as seen in Table 16 The family income of students at school 3 is significantly greater than that of school 1. Analysis of the data reveal

that 49.5% of the students at school 1 report a family income of \$30,000(+) per year, while 70.8% and 82.6% of the students At schools 2 and 3 respectively report a family income of \$30,000(+) per year. Once again, this has to do with the difference between state and ivy league schools.

E. Grade-Point Average

Students from school 3 report a significantly higher grade point average than students from either of the two other schools. This was anticipated as students attending state schools will not be as scholastically superior as students attending an ivy league school. These results are reported in Table 21

The demographic data, when analyzed among schools, reveals that subjects from the three schools have a mena age of under 20 years old, do not significantly differ in terms of year in school and marital status. School 3 subjects have better grades, higher family incomes, and a higher Jewish composition. These significant differences are summarized in Table 12 The ANOVA and Tukey (HSD) follow-up test results are reported in Tables 13 through 21

Table 12

SIGNIFICANT DIFFERENCES IN DEMOGRAPHICS AMONG THE DIFFERENT SCHOOLS

	/-----\ school 1		/-----\ school 2		/-----\ school 3	
	M	SD	M	SD	M	SD
Age	18.9	1.39 (n=96)	20.2	1.39 (n=20)	19.5	1.50 (n=21)
Height	M 5.90	SD .24 (n=1.5)	M 5.38	SD .084 (n=24)	M 5.40	SD .133 (n=23)
Weight	M 164.2	SD 23.19 (n=101)	M 143.4	SD 14.69 (n=22)	M 129.4	SD 15.21 (n=23)
Income	M 3.31	SD .79 (n=103)	M 3.67	SD .56 (n=24)	M 3.80	SD .38 (n=23)
Grade Point Average	M 2.78	SD 1.0 (n=93)	M 3.2	SD .88 (n=24)	M 4.2	SD .75 (n=23)

Table 13

ANOVA FOR AGE

Source	SS	df	MS	F
Schools	30.399	2	15.200	7.617**
Error	267.396	134	1.996	
Total	297.795	136		

**p<.01

Table 14

ANOVA FOR HEIGHT

Source	SS	df	MS	F
Schools	8.326	2	4.163	90.59**
Error	6.848	149	.0460	
Total	15.174	151		

**p<.01

Table 15

ANOVA FOR WEIGHT

Source	SS	df	MS	F
Schools	26551.91	2	13275.96	29.94**
Error	63409.43	143	443.423	
Total	89961.34	145		

**p<.01

Table 16

ANOVA FOR FAMILY INCOME

Source	SS	df	MS	F
Schools	6.38	2	3.19	6.275**
Error	74.69	147	.508	
Total	81.07	149		

**p<.01

Table 17

TUKEY-HSD MULTIPLE RANGE TEST FOR AGE

Mean	Group	1	2	3
18.89	Group 1			
19.48	Group 2			School 2 > School 1 & 3
20.20	Group 3	*		

* p<.05

Table 18

TUKEY-HSD MULTIPLE RANGE TEST FOR HEIGHT

Mean	Group	2	3	1
5.39	Group 2			
5.40	Group 3			School 1 > School 2 & 3
5.90	Group 1	*	*	

* p<.05

Table 19

TUKEY-HSD MULTIPLE RANGE TEST FOR WEIGHT

Mean	Group	3	2	1
129.39	Group 3			
143.41	Group 2			School 1 > School 2 & 3
164.21	Group 1	*	*	
* p<.05				

Table 20

TUKEY-HSD MULTIPLE RANGE TEST FOR FAMILY INCOME

Mean	Group	1	2	3
3.31	Group 1			Sch 3 > Sch 1
3.67	Group 2			
3.83	Group 3	*		
* p<.05				

Table 21

TUKEY-HSD MULTIPLE RANGE TEST FOR GRADE POINT AVERAGE

Mean	Group	1	2	3
2.78	Group 1			School 3 > School 1 & 2
3.21	Group 2			
4.26	Group 3	*	*	
* p<.05				

As data for the short subjects were collected from two different schools (School 2 = state university and School 3 = Ivy League University) it is important to highlight that these two schools were demographically quite similar. The mean age for subjects from school two was somewhat older (20.2) than that of subjects in school three (19.5) but this difference is not "clinically" significant in terms of height, weight, or income. The subjects at school three do have better grades. In addition, it is important to ascertain whether or not these two sub-groups responded similarly to the 4 measures. If they did respond similarly, it would justify the pooling of data from these two schools.

t-tests between schools 2 and 3 were performed on the Body Cathexis Scale and the Security Inventory. The Semantic Differential was subjected to an ANOVA and the Activity Vector Analysis was visually inspected to assess possible response differences between the two short groups.

As may be seen in Table 22, the t-tests performed on the Body Cathexis Scale and the Security Inventory did not attain significance ($p < .05$), indicating that the short subjects from the two schools responded similarly on these two measures.

Visual inspection of the AVA data for the two short groups (Appendix J) reveals a single cluster for both the groups. 70% of the subjects are within this cluster, with no other identifiable cluster present. This indicates that the short subjects from the two schools responded similarly on this measure.

The ANOVA results on the Semantic Differential Measure for the two short groups may be seen in Table 23. The main effect for the height groups did not attain significance [$F(1,37)=0.49$] while the main effect for rated height did attain significance [$F(2,74)=18.83, p<.001$]. This effect was anticipated as it was also obtained with the main group of subjects. This effect does not pertain to differences between the two short subject groups.

The interaction of the two main effects was significant [$F(2,74)=4.88, p<.05, w^2=.038$]. It must be noted that the effect size as reflected in the w^2 of .038 is rather small.

Hence, the convergence of results on the 4 measures substantially supports the decision to merge these groups as one for purposes of analyses in this study.

Table 22

T-TEST RESULTS BETWEEN THE TWO SHORT SUBJECT GROUPSVariable: Body Cathexis Scale

Group	N	Mean	SD	t	df	P
2	18	2.85	.4074	2.00	37	N.S.
3	21	2.63	.2793			

Variable: Security Inventory

Group	N	Mean	SD	t	df	P
2	18	20.56	11.01	-.070	37	N.S.
3	21	24.38	15.70			

Table 23

ANOVA FOR SEMANTIC DIFFERENTIAL DATA BETWEEN THE TWO SHORT SUBJECT GROUPS

Source	SS	df	ms	F	w ²
Height Group	.214	1	.21378	0.49	
Error	16.302	37	.44060		
Rated Height	7.741	2	3.870	18.83	.175
Interaction	2.005	2	1.003	4.88	.038
Error	15.209	74	0.205		

Chapter IV

MEASURES

The present study utilized five measures. A Body Cathexis Scale was used to obtain data on how subjects felt about their own bodies. A Security Insecurity Inventory was employed in order to measure the experience of psychological security. The Activity Vector Analysis (AVA) was utilized as a measure of self-concept and a Semantic Differential measure was utilized to assess how positively or negatively a subject felt about men of short, average, and tall height. Finally, a questionnaire was specifically designed to assess the perceived importance of height in everyday situations.

The Body Cathexis Scale

Secord and Jourard developed the Body Cathexis Scale because they believed that an individual's attitude toward his body was of crucial importance in any comprehensive theory of personality. They postulated that body-cathexis is integrally related to the self-concept, although identifiable as a separate aspect.

The scale was initially developed by asking subjects to indicate on a scale, the strength and direction of feeling which one has about each of the various parts or functions of the body. The measure was extensively pilot-tested on college students and items that were difficult to understand, difficult for the subjects to assign a meaning-

ful rating, or which resulted in little variability from subject to subject, were eliminated.

The results of this study revealed a statistically significant relationship between body cathexis and self cathexis ($r=.58$ for men and $.66$ for women). This supported their hypothesis that the valuation of the body and the self tend to be commensurate.

The revised form of the Body Cathexis Scale (Jourard and Secord, 1954) was used in this study to measure "the degree of feeling of satisfaction or dissatisfaction with the various parts or processes of the body" (Secord and Jourard, p. 343).

There are three studies in the literature reporting split-half reliability coefficients for the Body Cathexis Scale. In the earliest of these studies (Secord and Jourard, 1953) the split-half reliability coefficient (stepped-up by the Spearman-Brown formula) was $.78$ for male subjects ($n=45$) and $.83$ for female subjects ($n=43$). Jourard and Remy (1955) using 51 female and 48 male college students found split-half reliability to be $.91$. Weinberg (1960), using 108 males and 104 females found the split-half reliability to be $.87$.

There are two reports of test-retest reliability, with the earlier one (Johnson, 1956), yielding a reliability coefficient of $.72$ (6-8 week interval) and the latter one (Tucker, 1981) using 83 male undergraduates, reporting a reliability coefficient of $.87$. In the latter case, there was approximately a two week interval between administrations. Overall, these results suggest that the Body Cathexis Scale is

internally consistent and stable over time. A copy of this measure is found in appendix D.

The Maslow Security-Insecurity Inventory

A.H. Maslow came to construct this measure as a by-product of clinical and theoretical research with the concept of psychological or emotional security (Maslow, 1942,1945). The purpose of the measure, according to Maslow, is to detect and measure the feeling of security.

As reported in the manual (Maslow, 1952), the development of the final form was preceded by the clinical study of a large number of individuals who were known to be secure or insecure in terms of the clinical criteria extant at that time. A preliminary test was first administered to over 500 college students, leading to the development of a more refined form. This form was administered to over 1,000 college students. The final form consists of:

75 questions divided into three groups of twenty-five each, with each of 25 on a single page, thus making three equivalent and interchangeable forms of the test. (Maslow, 1952, p. 4).

Each of the sub-tests correlates with the total score over .90 and each of the sub-tests is comprised of an approximately equal number of yes and no questions, with no correlations with self-esteem. The final score is a systematic sampling of each of the known aspect of psychological security of individuals.

As mentioned above, the items selected for the measure have been clinically tested and when subjects who had taken the test were asked to estimate the validity of the test score by comparing it with their own opinion of themselves, "88% judged it to be extremely accurate or fairly accurate" (Maslow, 1952, p. 4)

Both test-retest and split-half reliabilities are reported in the manual (Maslow, 1952). A test-retest reliability coefficient of .84 was found with a sample of 62 over a two week interval and a split-half reliability coefficient of .86 (stepped up by the Spearman-Brown formula) was reported using 100 subjects.

When the split-half reliability coefficient is calculated by a technique of sorting out the pairs of questions measuring each of the fourteen subsystems, the reliability figure obtained was .91.

Gough (1948) found that S-I scores of a high school population were not influenced by intelligence, academic performance, or various economic differences in this population.

A copy of this measure is found in Appendix G.

The Activity Vector Analysis (AVA)

The Activity Vector Analysis (Clarke, 1956) is a widely-used scale designed to measure self-concept. The scale is constructed in a free-response adjective checklist format and it is analyzed on both an ipsative and normative basis and provides an understanding of the

balance of behavioral tendencies within the individual. The form E version of the scale was used in this study and this form consists of 87 non-derogatory adjectives descriptive of human behavior. The AVA allows subjects to respond in a way which is characteristic of their behavior and yields personality descriptions through the measurement of self concept.

The personality interpretation from the AVA is made through ipsative integration of four basic unipolar factors (i.e. aggressiveness, socialbility, emotional stability and social adaptability). This four-factor model yields 258 specific AVA profiles. The scores obtained, based on factor analytic studies, are compared with scores from 1200 subjects used to standardize this version of the instrument.

The AVA system is constructed so that pattern shapes which reflect similar types of self concepts are spatially close to each other on the universe of all the possible pattern shapes. Hence, similar pattern shapes will form a "cluster" which is identifiable. That is, those individuals with similar self-concepts will be close together on the pattern universe.

The determination as to whether a particular pattern shape belongs to a cluster is based on a correlation of at least .69 with a pattern shape which has been chosen as the center of the cluster. The pattern shape in the center of the cluster is chosen if it correlates at least .69 with as many of the other pattern shapes as possible. This criterion was used in all previous studies (Merenda, 1964, 1968; Merenda et al, 1970, 1971; Merenda & Mohaw, 1966; Merenda and Shapiro, 1974).

A method exists for obtaining Pearson-type correlation coefficients between profiles, thereby making it possible to compare any two profiles in terms of a statistical relationship (Clarke, 1956; Manual for the Activity Vector Analysis 1972).

Scoring of the AVA is based on profiles which are generated from the adjectives the subject has checked. These profiles are called "pattern shapes." The "pattern shapes" are composed of four vectors. Each vector representation represents the potential for behavior of a specific personality dimension. Vector #1 expresses the degree of Aggressiveness Vector #2 expresses the degree of Sociability vector #3 represents the degree of Emotional Stability and vector #4 represents the degree of Social Adaptability.

There are several studies in the literature attesting to the construct validity of the AVA (Clarke, 1956; Hammer, 1958; Musiker, 1958; Merenda, Clarke, Musiker, and Kessler, 1961). Whisler (1957), using four college samples of 48, 36, 71, and 49 subjects, found evidence for the descriptive validity of the AVA.

Hammer (1958) found a significant relationship among three sources of information that was elicited about 38 college students. The three sources were (1) a "blind analysis" by AVA analysts of the 38 subjects' AVA profiles. This was followed by Q-sorts by the analysts using the AVA profile information. (2) The second source of information was obtained from Q-sorts performed by graduate students using biographical data provided by the subjects. (3) The third source of information was received from a Q-sort performed by individuals who had close social contacts with the respective subjects.

In another study of the same year, Musiker (1958) found that personality variables measured by the AVA can be meaningfully related to the 10-C scores on the Guilford-Zimmerman Scale. Merenda, Clarke, Musiker, and Kessler (1961), administered both the AVA and Kessler Passive-Dependency Scale to a sample of 99 female and 181 male subjects. The results demonstrated the construct validity for both of these instruments.

There are three studies reported in the literature that demonstrate the reliability of the AVA. In the earliest of these studies (Mosel, 1954) the AVA was administered twice within a two-week interval. a reliability estimate of .74 and .73 were obtained for social self-concepts and basic self-concepts respectively.

Merenda and Clarke (1959) reported profile reliability studies based on five independent samples. With the typical time interval of 12 months, the average reliability coefficients were found to be .77 for image profiles (the profile resulting from a combination of the basic self and role profiles), .75 for social self-concept profiles, and .72 for basic self-concept profiles.

In another study (Hasler and Clarke, 1968) of reliability in which a one month interval was used, test-retest reliability coefficients for role profiles and basic self-profiles were found to be .82 and .78 respectively. Given these results, it may be concluded that the Activity Vector Analysis produces a stable profile.

In the present study, subjects were asked to complete a three-fold AVA aimed at assessing subjects' basic self, social self, and ideal self. A copy of the AVA instruments is found in Appendix E.

The Questionnaire

A questionnaire was specifically designed for use in this study, as no suitable standardized measure existed. The goal was to design a questionnaire that would add a dimension of richness in the form of both quantitative and qualitative data regarding the way in which college age males think and feel about the importance and impact of physical stature.

The available literature on questionnaire design was reviewed (Moses, 1961; Parten, 1966; Babbie, 1973; Best, 1971; Gardner, 1980) before constructing the questionnaire for this study. The number of questions was kept to a minimum and the wording of the questions was simple and easy to understand.

The final draft of the questionnaire was pilot-tested on a small group of individuals and the pilot group was asked to offer suggestions for improving clarity. In order to assess test-retest reliability this revised questionnaire was administered to a group of college age subjects with a two-week interval between administrations. A copy of the questionnaire may be found in Appendix H. The stability of the questionnaire over time was assessed in a test-retest reliability study conducted using 81 male and female college age subjects.

As may be seen in table 24, the results of this study indicate that the test-retest correlation coefficients range from a high of .88 (question #4) to a low of .38 (question # 11) over a two-week interval. Since this questionnaire was not designed to reflect a single underlying dimension, an analysis of internal consistency was not performed.

Table 24

TEST-RETEST RELIABILITY FOR QUESTIONNAIRE

(2 week interval)

<u>Question Number</u>	<u>Correlation Coefficient</u>	<u>n</u>
1	.664	80
2	.560	81
3	.725	79
4	.883	80
5	.502	81
6	.542	81
7	.541	81
8	.484	81
9	.669	81
10	.594	80
11	.381	81
12	.694	81
13	.619	81
14	.408	81
15	.696	81
16	.536	81
17	.561	79

The Semantic Differential Measure

The Semantic Differential technique (Osgood, Suci, and Tannenbaum, 1957) was developed as a tool to study the psychology of meaning. Al-

though the Semantic Differential technique is often referred to as if it were some kind of "test", having some definite set of items, this is not the case. To the contrary, "it is a very general way of getting at a certain type of information; a highly generalizable technique of measurement which must be adapted to the requirement of each research problem to which it is applied" (Osgood, Suci, and Tannenbaum, 1957, p. 77).

The usefulness of the semantic differential technique was soon discovered leading to its application in many different contexts. It has been used in research on such varied problems as clinical diagnosis, vocational choices, cultural differences, and consumer's reactions to products and brand names. The bibliography on the semantic differential technique includes over 1500 references (Sniden and Osgood, 1968).

Kerlinger (1973) describes the semantic differential technique as:

a number of scales, each of which is a bipolar adjective pair, chosen from a large number of such scales for a particular research purpose, together with the concepts to be rated with the scales, the underlying nature of which has been determined empirically (p. 568).

In other words, a semantic differential is a scale consisting of a concept to be rated on numerous 7-point graphic scales. The concept is rated as being more closely related to one or the other of a pair of opposites. subjects are asked to rate each concept on the entire set of scales, and the rating profile which results is said to indicate the "meaning" of the concept.

The use of a 7-point scale was decided on because "over a large number of different subjects in many different experiments it has been found that with seven alternatives all of them tend to be used and with roughly, if not exactly, equal frequencies" (Osgood, Suci, and Tannenbaum, 1957, p. 85).

Osgood, Suci, and Tannenbaum (1957) using factor analytic technique, found that three major factors accounted for the largest percentage of total variance. In the order of amount of variance accounted for, they are (1) Evaluation, (2) Potency, and (3) Activity. Evaluation is interpreted as "goodness," Potency is interpreted as "strength," and Activity is interpreted as expressing motion or action.

Osgood, Suci, and Tannenbaum (1957) report test-retest reliability coefficients in a study using 100 subjects. The 100 subjects completed ratings on 40 different scales yielding a reliability coefficient of .85.

Internal Consistency of the Semantic Differential Measures Used in this Study

The adjectives used in the construction of the semantic differential for this study were culled from several sources (Osgood, Suci, and Tannenbaum, 1957; Coyne and Holzman, 1966; Harigopal, 1979; Albaum et al., 1981) and the use of the standard seven point scale was chosen.

Regarding the wording of the concepts chosen, Osgood, Suci, and Tannenbaum (1957) specify that:

The investigator will usually (a) try to select concepts for the meaning of which he can expect considerable individual differences since this is likely to augment the amount of information gained from a limited number of concepts (b) try to select concepts which can be expected to be familiar to all his subjects (p.77).

That is, the concepts must produce large variance among persons and they should, to some extent, cover the semantic space.

Regarding the choice of scales, the two main criteria are the factor representativeness and the relevance to the concepts used (Kerlinger, 1973).

For the purposes of the assessment of the internal consistency of the three semantic differential measures (1) men of short height, (2) men of average height, (3) men of tall height a coefficient alpha (Chronbach, 1951) for each of these three measures was computed. As seen in Table 25, the results of these analyses reveal a rather high level of internal consistency, with all three scales yielding alpha coefficients in the mid-eighties.

Test-Retest Reliability of the semantic differential measure used in this study

It is essential, when making statements based on the results of a particular measure, that the measure be shown to be stable across time. To assure that the measures were stable, a Test-Retest reliability study was conducted. Using 82 male and female subjects, the

Table 25

INTERNAL CONSISTENCY OF THE SEMANTIC - DIFFERENTIAL MEASURES USED IN THIS STUDY

The Measure	Coefficient Alpha	N
Men of Average Height	.85	316
Men of Short Height	.84	316
Men of Tall Height	.87	316

measures were administered and readministered with a two-week interval. The results of the test-retest reliability of individual items may be found in Table 26 .

The test-retest reliability of the whole measures were also computed yielding a reliability coefficient for measure 1 of .64 (N=82), for measure 2 of .81 (n=81), and for measure 3 of .72 (n=81). A copy of the semantic-differential measures may be found in appendix E.

Table 26

TEST RETEST RELIABILITY COEFFICIENTS FOR INDIVIDUAL ITEMS ON THE SEMANTIC DIFFERENTIAL

Men of Average Height
(measure 1)

<u>Item No.</u>	<u>r</u>	<u>N</u>		<u>Item No.</u>	<u>r</u>	<u>N</u>
1	.192	82		10	.041	82
2	.282	80		11	.326	82
3	.381	82		12	.479	82
4	.286	82		13	.467	82
5	.170	82		14	.361	82
6	.385	82		15	.246	82
7	.563	82		16	.207	82
8	.218	82		17	.291	82
9	.289	82				

Men of Short Height (Measure 2)

<u>Item No.</u>	<u>r</u>	<u>N</u>		<u>Item No.</u>	<u>r</u>	<u>N</u>
1	.484	81		10	.507	81
2	.422	79		11	.432	81
3	.569	81		12	.640	81
4	.612	81		13	.700	81
5	.643	80		14	.574	81
6	.559	81		15	.599	81
7	.609	81		16	.622	81
8	.559	81		17	.529	81
9	.507	81				

Men of Tall Height (Measure 3)

<u>Item No.</u>	<u>r</u>	<u>N</u>		<u>Item No.</u>	<u>r</u>	<u>N</u>
1	.630	81		10	.399	81
2	.421	79		11	.252	81
3	.666	81		12	.526	81
4	.438	81		13	.348	81
5	.533	81		14	.390	81
6	.476	81		15	.472	81
7	.383	81		16	.570	81
8	.308	81		17	.361	81
9	.495	81				

Chapter V

RESULTS

5.1 QUESTIONNAIRE

Each item of the questionnaire was subjected to an analysis of variance among the three height groups (short, average, tall). The Fmax assumption for homogeneity of variance was tested and none of the groups were found to be heterogeneous. If significant ANOVA results were achieved, a Tukey (HSD) Test was used as a follow up test in order to ascertain where significant differences were. The results of the ANOVA and Tukey analyses may be found in Tables 30 and 31 . A copy of the questionnaire may be found in Appendix H.

A. Analysis of Individual Items

Question 1: Do you feel that your height has been a help to you socially?

Question 2: Do you feel that your height has been a hinderance to you socially?

Questions #1 and #2 were designed to assess whether subjects thought that the dimension of height has a social advantage or disadvantage.

In question #1 significant ANOVA results were attained [$F=16.68(2,116)$, $p<.05$]. Tukey (HSD) follow-up test results reveal a significant difference between the Tall and Short groups and the Tall and Average height groups. No significant difference was found between the Short and Average height groups. It is clear that taller subjects believe that their height has been a distinct asset in their social interactions. Although the average height and short height subjects do not significantly differ on this question, the potential trend is linear from short to tall subjects.

Significant ANOVA results were attained for question #2 [$F=92.98(2,117)$ $p<.05$]. The Tukey (HSD) follow-up test results show a significant difference between the short and tall group and the short and average Group. The average height and tall groups did not significantly differ.

The responses to question #2 reveal that both the tall and average height subjects do not believe that their height has hindered them socially. The responses of these two groups falls between the "never" to "rarely" response categories. This is in distinct contrast to their shorter counterparts who believe that their height has been a hinderance to them socially. The response of the short group falls between the "sometimes" to "often" categories. The trend is linear with tallest subjects reporting the lowest frequency, the average height subjects reporting a higher frequency, and the short subjects reporting the highest frequency.

Question #3 Do you ever add inches when reporting your height?

On this question, none of the three groups admitted to adding inches when reporting their height [$F=2.18(2,117)$, n.s.]. The means for the three groups were clustered between the "never" and "rarely" response categories (Short: 1.79, Ave.: 1.61, Tall: 1.35).

Question #4 If you could choose any height to be what would it be?

This question was included with the purpose of assessing the overall satisfaction that each group experiences regarding their own height. The ANOVA results were significant [$F=21.24(2,116)$ $p<.05$]. The Tukey (HSD) follow-up test revealed significant differences between all groups with the Short subjects desiring the greatest height increase (Mean = 6.1 inches), the Average height subjects desiring a moderate height increase (Mean = 2.9 inches) and the tall subjects desiring the least increase in height (Mean = 1.1 inches). The actual and ideal desired height for the three height groups may be seen in Table 27 Even though the tall subjects desired the smallest increase in height, the difference between their actual and ideal height did attain statistical significance.

The three groups did not all choose the cultural ideal for height (around 6'2") but rather the short subjects wanted to be 5'9", the average height subjects 6'0" and the tall subjects 6'2". The results reveal that the shortest group desire the greatest increase in height and the tallest group desires the least. These results are presented in Figure 1

Table 27

THE ACTUAL AND IDEAL DESIRED HEIGHT FOR MALE SUBJECTS

	Short	Average	Tall
Height	5' 4"	5' 8"	6' 1"
Ideal Height	5' 9"	6' 0"	6' 2"
Count	41	38	40
Standard Deviations	.08 .23	.07 .19	.18 .29
Difference between actual and ideal height	6.1"	2.9"	1.1"

$\Omega^2 = .287$

Questions #5 thru #11: "The list below contains a number of social situations in which height comparisons might be made. Using the scale below, indicate to what extent you feel comfortable in each situation."

Of the seven hypothetical situations presented in the questionnaire the ANOVA results were significant in four of them: Question 7 [F=7.38(2,117) $p < .05$], Question 8 [F=8.03(2,117) $p < .05$], Question 9 [F=15.63(2,116) $p < .05$], and Question 10 [F=12.43(2,117) $p < .05$].

The Tukey (HSD) follow-up test for question #7 reveals that the short subject is significantly ($p < .05$) less comfortable on a first date than both the average and tall subject groups, while the tall and average subject groups did not significantly differ.

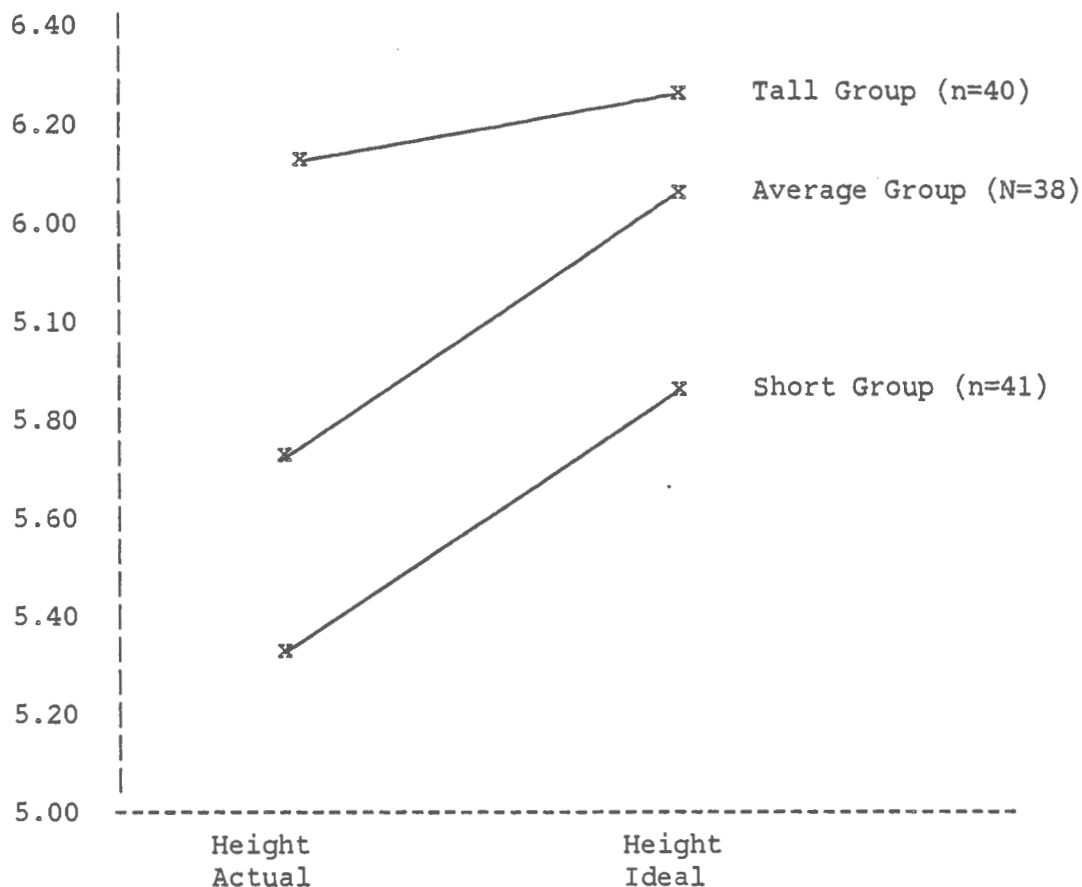


Figure 1
THE ACTUAL AND IDEAL HEIGHT FOR MALES OF SHORT, AVERAGE AND TALL
HEIGHT

On Question #8, the tall subjects reported being significantly more comfortable involved in a contact sport than both the average and short subjects. The average height and short subjects did not significantly differ. This result probably reflects the importance of being taller than average for most competitive sports. The potential trend is as anticipated, with Shorts being least comfortable, Average height

subjects being less comfortable and tall subjects being most comfortable.

The Tukey (HSD) follow-up test results for question #9 revealed that the tall subjects felt significantly ($p < .05$) more comfortable at a crowded party than either the average height or Short subjects, who did not significantly differ from one another.

The responses to question #10 revealed that both tall and average height subjects were significantly more comfortable than the short subjects when standing at a club or bar.

It may be worth mentioning that in two of the three hypothetical situations in which no significant differences were found (Questions #5 and #7) the means reveal Short subjects reporting more comfort, and Tall subjects reporting the most comfort. The means and standard deviations for questions 1-11 may be seen in Table 28

Overall, the subject's responses to questions #5 - #11 reveal a significant difference in comfort level that men of different height experience in situations where height comparisons might be made, with the short subjects reporting the lowest comfort level.

Table 28

MEANS AND STANDARD DEVIATIONS (QUESTIONS 1-11) FOR SHORT, AVERAGE, AND TALL QUESTIONNAIRE RESPONSES

Q #	Grand Mean	N	Short		Average		Tall	
			\bar{M}	SD	\bar{M}	SD	\bar{M}	SD
1	2.57	119	2.12	0.861	2.38	0.893	3.22	0.947
2	2.04	120	3.24	0.820	1.53	0.797	1.28	0.452
3	1.58	120	1.79	1.14	1.61	0.887	1.35	0.770
5	2.92	119	2.68	0.986	2.82	1.04	3.25	1.17
6	2.92	120	3.14	1.26	3.08	1.05	2.55	1.32
7	2.79	120	2.31	0.869	3.00	1.04	3.10	1.13
8	3.52	120	3.12	1.21	3.39	1.03	4.05	0.960
9	3.19	119	2.58	0.948	3.18	1.06	3.82	0.984
10	3.13	120	2.57	0.980	3.21	1.043	3.65	0.975
11	3.17	120	2.93	0.778	3.29	0.803	3.3	1.02

Question #12: How important do you think a man's height is in acquiring a dating partner?

The results of the ANOVA on this question was significant [F=6.62(2,117) $p<.05$] with the Tukey (HSD) follow-up test revealing that the Short subjects significantly differed ($p<.05$) from both tall and average height subjects. While Short subjects felt that height was "moderately important" to "very important" in terms of acquiring a dating partner, the Tall and Average height subjects thought in only "slightly" to "moderately" important. The means and standard deviations for question 12-17 may be found in Table 29

Question #13: How important do you think a man's height in acquiring a marriage partner?

Unlike the responses to question #12 regarding dating partners, the respondents did not significantly differ in their feeling on this question [F=1.33(2,117), n.s.]. The entire group believes, on the average (M=2.14), that it is not a terribly important factor in mate selection. It should be noted that the majority of this sample is unmarried (94%) having little or no experience with marriage.

Question #14: How important do you think a man's height is in being professionally successful in life?

The three height groups did not significantly differ in their opinions on this question [F=0.49(2,117), n.s.]. The mean score for all three groups clustered between the "slightly important" to "moderately

important" category (Shorts: $M = 2.24$, $SD = 1.00$; Average: $M = 2.47$, $SD = 1.22$; Tall: $M = 2.30$, $SD = 1.04$).

Question #15: Comparing your physical attractiveness with that of others of your sex and age, how attractive do you think you are?

The result of the ANOVA for Question #15 was significant [$F = 5.02(2,117)$ $p < .05$] and the Tukey (HSD) analysis revealed that Short subjects feel significantly ($p < .05$) less attractive than the Average height and tall subjects. The Average height and Tall subjects did not significantly differ from one another.

Questions #16 and #17:

Comparing your overall desirability as a (dating partner-#16; marriage partner-#17) with others of your sex and age, how desirable do you think you are?

There were no significant between-group differences found on questions #16 and #17 [Q16: $F(2,117) = 1.78$, n.s.; Q17: $F(2,117) = 1.79$, n.s.]. The whole group reported feeling "somewhat more than average" to "average" in desirability as a dating and marriage partner (grand mean = 2.50 and 2.35 respectively).

Table 29

MEANS AND STANDARD DEVIATIONS (QUESTIONS 12-17) FOR SHORT, AVERAGE, AND TALL QUESTIONNAIRE RESPONSES

Q #	Grand Mean	N	Short		Average		Tall	
			M	SD	M	SD	M	SD
12	2.75	120	3.19	0.833	2.58	0.976	2.45	1.13
13	2.14	120	2.19	1.02	2.32	1.14	1.93	1.10
14	2.33	120	2.24	1.00	2.47	1.22	2.30	1.04
15	2.63	120	2.93	0.838	2.50	0.647	2.45	0.749
16	2.50	120	2.71	1.04	2.42	0.642	2.38	0.838
17	2.35	119	2.19	0.890	2.57	0.835	2.33	0.944

In summary, the results of this questionnaire reveal that in many instances height plays a significant role in the way males feel about themselves.

It is clear from the results of the questionnaire that the subjects in this study believe that being taller is a social asset and conversely, that short stature is a social liability. Moreover, the short subjects are more poignantly aware of the impact of height as they are the ones who must confront their "difference" within the social sphere on a daily basis.

The seven hypothetical social situations highlighted this aspect. In four of the seven situations significant differences between the groups were attained and the trend of "talls" reporting greatest comfort and "shorts" reporting the least comfort was consistent, revealing the important role of height comparison within a social context.

Regarding the issues surrounding height in males and heterosexual relationships it is the short subjects who must negotiate a "problem" and as anticipated it is the short subjects who report the greatest awareness of potential issues. Apparently, short stature in males has some impact in their overall sense of their own attractiveness and desirability to females.

While the short males in this study reported a desire for the most significant increase in height, the tall subjects also reported a desire for a significant increase that would bring them to the height of the cultural ideal for males: 6'2".

All in all, the results of the questionnaire reveal that all males regardless of height report wanting to be significantly taller and this belies a cultural emphasis on height and its probable relationship to other important factors.

If height were not such an important societal marker the desire to exchange one height for another would not be so readily apparent.

Table 30

ANOVA TESTS FOR THE QUESTIONNAIRE DATA

Question	Source	SS	df	MS	F	P	W ²
1	Height Grp. Error	27.060 94.082	2 116	13.53 0.81	16.68	.05	.209
2	Height Grp. Error	93.724 59.07	2 117	46.86 0.50	92.82	.05	.605
3	Height Grp. Error	3.916 105.250	2 117	1.958 0.899	2.18	n.s.	---
4	Height Grp. Error	2.552 6.969	2 116	1.27 0.06	21.24	.05	.306
5	Height Grp. Error	7.07 132.08	2 116	3.53 1.13	3.10	n.s.	---
6	Height Grp. Error	8.568 173.806	2 117	4.25 1.48	2.87	n.s.	---
7	Height Grp. Error	15.21 120.58	2 117	7.60 1.03	7.38	.05	.096
8	Height Grp. Error	18.583 135.38	2 117	9.29 1.15	8.03	.05	.105
9	Height Grp. Error	31.117 1115.43	2 116	15.56 0.995	15.63	.05	.197

30 continued)

on	Source	SS	df	MS	F	P	W ²
	Height Grp.	24.165	2	12.08	12.43	.05	.160
	Error	113.701	117	0.971			
	Height Grp.	3.66	2	1.83	2.41	n.s.	---
	Error	89.00	117	0.76			
	Height Grp.	12.86	2	6.43	6.62	.05	.086
	Error	113.639	117	0.97			
	Height Grp.	3.13	2	1.56	1.33	n.s.	---
	Error	137.46	117	1.17			
	Height Grp.	1.17	2	.586	0.49	n.s.	---
	Error	139.49	117	1.17			
	Height Grp.	5.68	2	2.84	5.02	.05	.063
	Error	66.18	117	0.56			
	Height Grp.	2.78	2	1.39	1.87	n.s.	---
	Error	87.20	117	0.745			
	Height Grp.	2.84	2	1.42	1.79	n.s.	---
	Error	92.33	116	0.795			

D) FOLLOW-UP TESTS FOR QUESTIONNAIRE DATA

Question	Height Group			
	Short	Average	Tall	
1	2.12	2.38	3.22*	T > S
		.26	1.10*	T > A
			.84*	S & A n.s.
	* p<.05 c.v. = .48			
2	1.28	1.53	3.24	S > T
		.25	1.96*	S > A
			1.71*	A & T = n.s.
	* p<.05 c.v. = .38			
4	5.87	6.01	6.22	All Pairwise
		.1412*	.3530*	diff. sig.
			.21184*	T > A > S
	* p<.05 c.v. = .131			
7	2.31	3.00	3.10	A > S
		.69*	.79*	T > S
			.10	T & A n.s.
	* p<.05 c.v. = .54			
8	3.12	3.39	4.05	T > A
		.69*	.79*	T > S
			.10	A & S n.s.
	* p<.05 c.v. = .57			

1 continued)

Question

Height Group

	Short	Average	Tall	
9	2.59	3.18 .59*	3.82 1.23* .64*	T > A > S
	* p<.05 c.v. = .53			
	Short	Average	Tall	
10	2.57	3.21 .64*	3.65 1.08* .44	A > S T > S T & A n.s.
	* p<.05 c.v. = .52			
	Tall	Average	Short	
12	2.45	2.58 .13	3.19 .74* .61*	S > T S > A T & A n.s.
	* p<.05 c.v. = .52			
	Tall	Average	Short	
15	2.45	2.50 .05	2.93 .48* .43*	S > T S > A T & A n.s.
	* p<.05 c.v. = .40			

5.2 BODY CATHEXIS SCALE (BC) AND SECURITY-INSECURITY INVENTORY (SI)

In the original design of this study, the Body Cathexis Scale and Security-Insecurity Inventory were to be subjected to a multiple analysis of variance. However, the correlation between these two measures was found to be essentially zero ($r = .06$), making a MANOVA analysis inappropriate. Hence, the data were subjected to an analysis of variance.

The results of the ANOVA among the three height groups on the Body Cathexis Scale attained significance [$F, (2, 114) = 4.06, p < .01$]. This is seen in Table 32

Table 32

ANOVA FOR BODY CATHEXIS SCALE

Source	SS	df	MS	F	P
Between Groups	1.635	2	.81767	4.06	$p < .01$
Within Group	22.966	114	.20146		
Total	24.601	116			

The Tukey (HSD) follow-up test results revealed that the short subjects differed significantly ($p < .05$) from the average height and tall subjects. These results are in Table 33. In other words, the short subjects feel significantly less positive about their bodies than do

the average height and tall subjects. The average height and tall subjects did not significantly differ from each other regarding their feelings about their bodies.

Table 33

TUKEY (HSD) MULTIPLE RANGE TEST FOR BODY CATHEXIS SCALE

Mean	Group	Average	Short	Tall
2.48	Average			
2.73	Tall	*		*
2.49	Short		Short > Average Short > Tall	

* $p < .05$

It is important to note that, although a significant difference was found, none of the groups report feeling "negatively" about their bodies. Rather, it is more accurate to say that the short males feel "less positively" about their bodies than their taller peers. This may be seen by the group means in Table 34 .

Table 34

MEANS AND STANDARD DEVIATIONS FOR THE BODY CATHEXIS SCALE

Group	n	M	SD
Short	41	2.73	.357
Average	40	2.48	.407
Tall	36	2.49	.574
All Subjects	117	2.57	.460

5.3 THE SECURITY-INSECURITY INVENTORY (SI)

The ANOVA results for the (SI) did not attain significance with all three of the height groups reporting a mean level of psychological security that is well within the "normal" range (Maslow, 1952). The mean score for the entire sample was 22.71 (SD=12.39) with no significant differences between the three groups ($F[2,114] = 0.02$). The results of the analysis of variance on the (SI) may be seen in Table 35, with the group means and standar deviations reported in Table 36 .

Table 35

ANOVA FOR MASLOW INSECURITY INVENTORY

Source	SS	df	MS	F	P
Between Groups	6.937	2	3.468	0.02	n.s.1
Within Group	17809.180	114	156.220		
Total	17816.117	116			

Table 36

MEANS AND STANDARD DEVIATIONS FOR MASLOW INSECURITY INVENTORY

Group	n	M	SD
Short	41	22.95	14.0
Average	40	22.77	9.98
Tall	36	22.36	13.18
All Subjects	117	22.71	12.39

5.4 SEMANTIC DIFFERENTIAL MEASURE

A 3X3 MANOVA design was utilized for the analysis of the semantic differential data. This design, as may be seen in Table 37, has short subjects, average height subjects, and tall subjects rating the three concepts: "men of average height", "men of short height", and "men of

tall height", across 17 paired adjectives. In a MANOVA analysis, the F ratio is actually an approximation and cannot be directly ascertained (Tabachnick, 1983). Therefore, in this study, the Wilk's Lambda, from which the subsequent F ratio was derived, will also be reported. (The F approximations given here were produced by the BMDP2V computer program).

Table 37

SEMANTIC DIFFERENTIAL 3X3 MANOVA DESIGN

Height Groups	"Men of Average Height"	"Men of Short Height"	"Men of Tall Height"
Short Subjects	Q1 - 17	Q1 - 17	Q1 - 17
Average	Q1 - 17	Q1 - 17	Q1 - 17
Tall	Q1 - 17	Q1 - 17	Q1 - 17

Analysis of the between-group main effects data reveals that the three height groups doing the rating do not significantly differ overall in their ratings of the semantic differential concepts [Lambda=.6497, $F(34,196) = 1.39$, ns]. That is, when the three rating scales are collapsed, the groups doing the rating do not significantly differ in their overall scores. This may be seen in Table 38a.

Analysis of the within-group main effects for rated height reveals that there is significant agreement among the three subject groups regarding the three concepts rated. That is, "men of tall height," "men of average height" and "men of short height" were rated differently [$\Lambda = .2812$, $F(24,424) = 11.05$ $p < .001$]. The magnitude of this difference is graphically displayed in Figure 2. Follow-up ANOVA's on the 17 items revealed significant effects for all but one of the items (item #3). These ANOVA results may be found in Appendix I. Table 38 lists means and standard deviations for these data.

Table 38

SEMANTIC DIFFERENTIAL WITHIN GROUP MAIN EFFECTS

Ratings of Men of Average, Short and Tall Heights

(N = 117)

Paired-Adjective	Average Height		Short Height		Tall Height	
	M	SD	M	SD	M	SD
1	3.10	1.03	3.74	1.48	3.27	1.37
2	4.34	1.17	3.51	1.37	4.83	1.45
3	4.63	1.06	4.53	1.10	4.36	1.21
4	3.35	1.23	4.30	1.29	3.07	1.26
5	3.22	1.19	5.12	1.13	2.90	1.33
6	3.76	1.50	4.20	1.48	4.49	1.43
7	5.20	1.16	4.59	1.30	5.35	1.24
8	3.24	1.23	3.72	1.39	2.78	1.31
9	4.90	1.03	3.89	1.20	4.96	1.12
10	3.68	1.15	3.94	1.15	3.06	1.25
11	3.30	1.06	4.25	1.31	3.02	1.15
12	4.95	1.09	4.49	1.25	4.66	1.20
13	3.76	1.05	4.70	1.28	2.55	1.16
14	2.93	1.02	4.08	1.45	2.85	1.26
15	3.18	.980	4.16	1.53	2.73	1.19
16	5.09	1.05	4.50	1.31	4.95	1.08
17	3.10	1.18	4.48	1.37	2.63	1.22

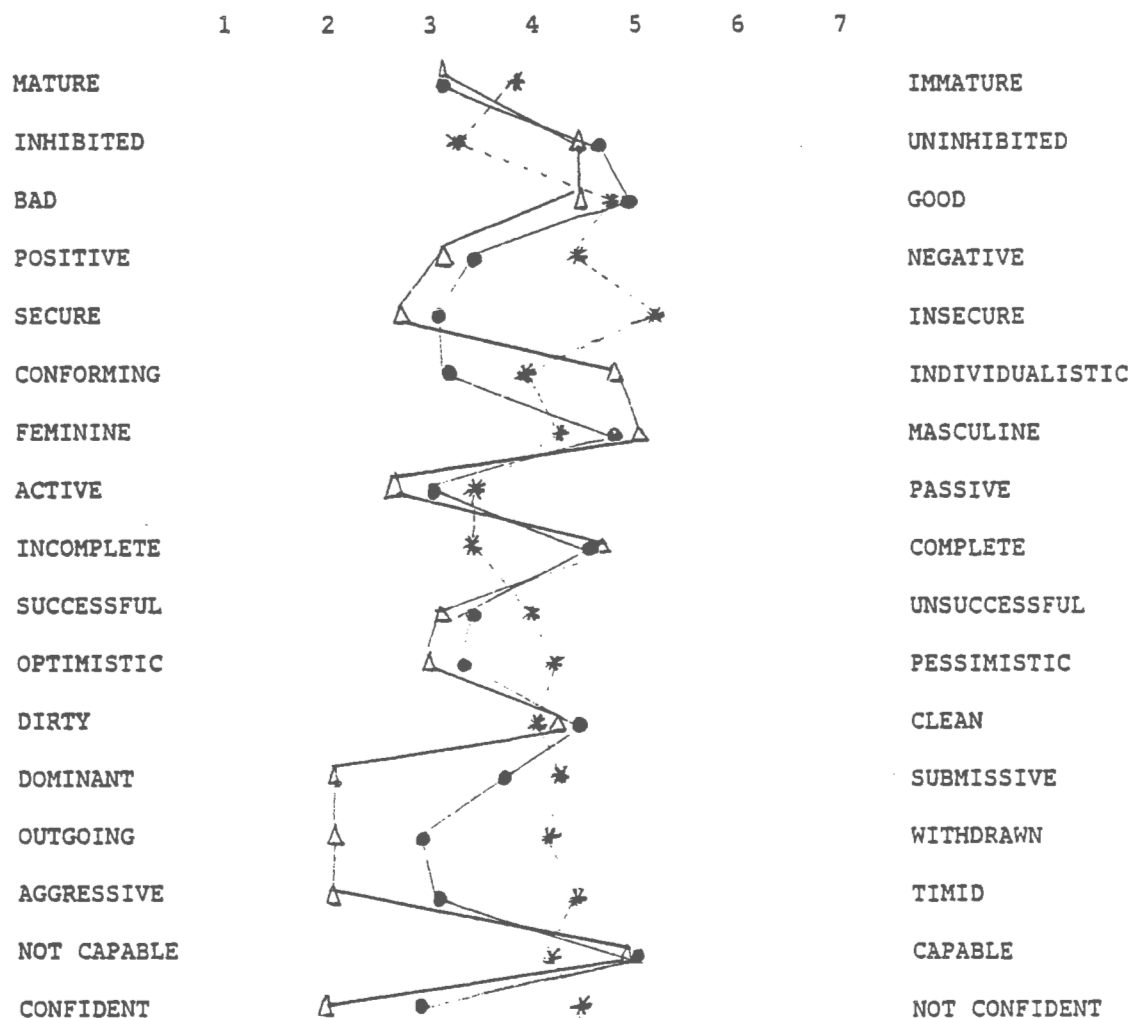
The patterns seen in Figure 2 may be summarized as follows: men of tall and average height, as compared to men of short height, are seen as being significantly more mature, uninhibited, positive, secure, masculine, active, complete, successful, optimistic, dominant, capable, confident, and outgoing. That is, the overall scores for the entire male sample strongly indicates that there is an attribution of more positively valenced personality traits and personal qualities to men of tall and average height. Conversely, "men of short height" are seen as possessing significantly fewer of these qualities.

Table 38a

MANOVA FOR SEMANTIC DIFFERENTIAL DATA

SOURCE	WILKS Λ	APPROX F	df	P
<u>Between groups</u>				
Height	.6497	1.39	34,196	>.05
<u>Within groups</u>				
Ht	.2811	11.05	34,424	<.001
Height x Ht	.3088	1.90	68,162	<.001

(N = 120)

KEY:

- MEN OF AVERAGE HEIGHT
- * MEN OF SHORT HEIGHT
- △ MEN OF TALL HEIGHT

Figure 2
SEMANTIC DIFFERENTIAL: WITHIN GROUP MAIN EFFECTS. RATINGS OF MEN OF
SHORT, AVERAGE, AND TALL HEIGHT

5.5 INTERACTION EFFECTS FOR THE SEMANTIC DIFFERENTIAL DATA

The analysis of the interaction effects for the semantic differential reveals some significant effects. That is, the height of the subjects doing the ratings has some effect on the rating of the three concepts: "men of average height", "men of short height", and "men of tall height" ($F=1.78[68,834]$ $p<.001$).

The scores on the 17 item semantic differential measures were collapsed in order to yield one composite score. The results, as seen in Table 39 were the same as for the MANOVA. The main effect for subject group did not attain significance [$F(2,114)=0.50$], while the main effect for rated height did attain significance [$F(2,114)=105.99$, $p<.001$].

Table 39

ANOVA FOR AVERAGED RATING SCALES: SEMANTIC DIFFERENTIAL

Source	SS	df	MS	F	P	W ²
Height Group	0.5872	2	0.2986	0.50	n.s.	---
Error	68.4225	114	0.6002			---
Rated Height	68.776	2	34.388	105.99	<.001	.309
Interaction	8.649	4	2.162	6.66	<.001	.033
Error	73.977	228	0.324			

The interaction of the two main effects were also significant [$F(4,228)=6.66$, $p<.001$] and simple effects tests for this significant interaction were conducted. These results are contained in Table 40 .

Table 40

SIMPLE EFFECT ANOVA FOR SEMANTIC DIFFERENTIAL INTERACTION EFFECTS

Source	SS	df	MS	F	P
All S Rating "Short"	2.38	2	1.46	3.52	<.05
All S Rating "Average"	1.690	2	.8453	2.03	N.S.
All S Rating "Tall"	4.63	2	2.31	5.55	<.01
Error	311.6	312	.4164		

Regarding "men of short height," a significant effect was found [$F(2,312)=3.52$, $p<.05$] indicating that the subject groups did significantly differ in their ratings. A tukey (HSD) follow-up test, as seen in Table 41 reveals that all differences are significant ($P<.05$) except for the differences between short and average height subjects.

Table 41

ALL SUBJECTS RATING "MEN OF SHORT HEIGHT": SEMANTIC DIFFERENTIAL AVERAGED SCALES. TUKEY (HSD) FOLLOW-UP TEST

<u>Subjects</u>		
Short	Average	Tall
3.89	3.99	4.27
	.10	.38*
		.78*

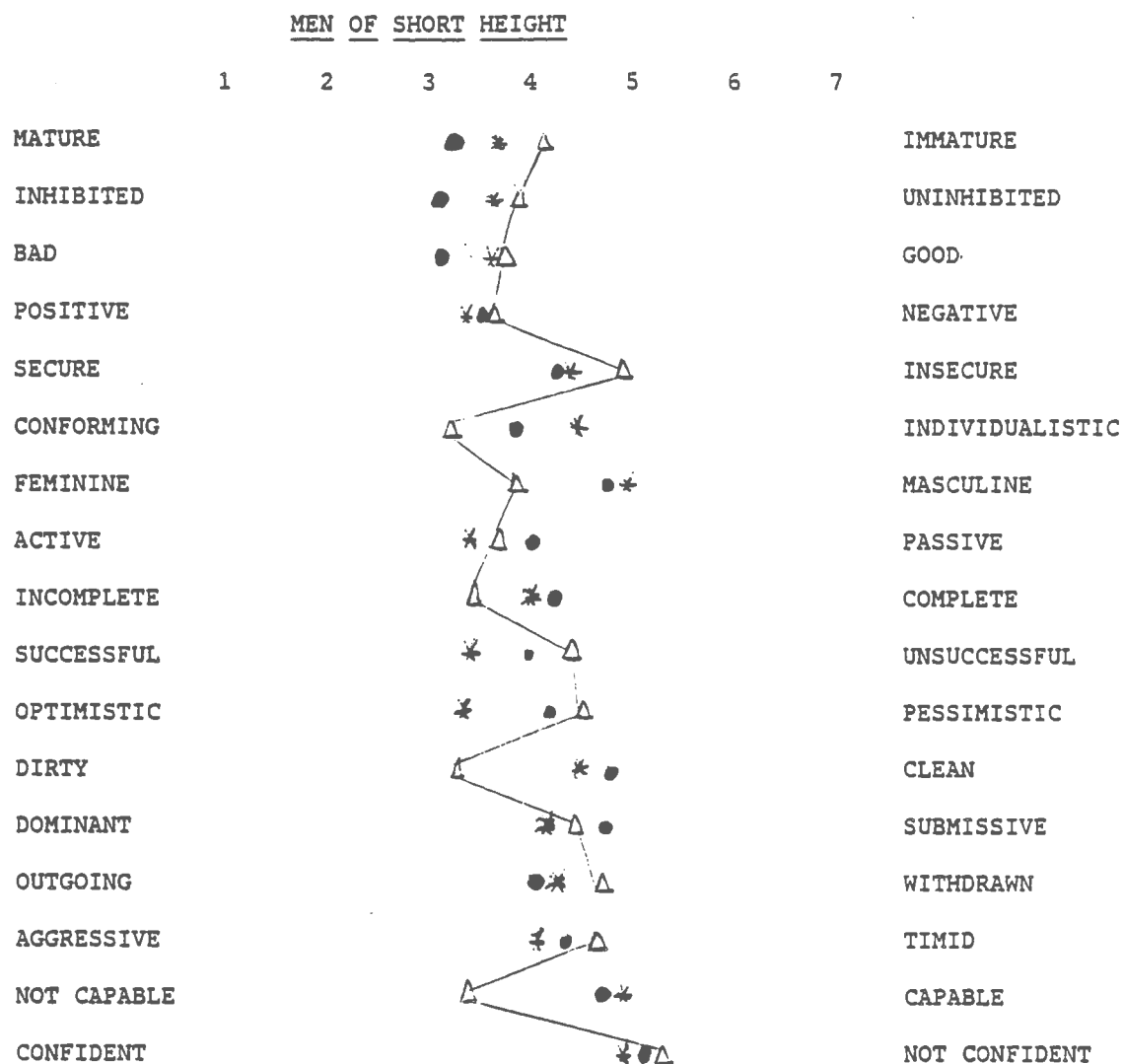
* $p<.05$ c.v. = .20

Regarding the concept "men of average height", no significant differences were found between groups $F(2,312)=2.030$. The mean ratings and standard deviations were as follows: short subjects ($n=40$) ($M=3.39$, $SD=.469$), average height subjects ($n=40$) ($M=3.32$, $SD=.664$), and tall subjects ($n=37$) ($M=3.11$, $SD=.602$). The overall results reveal that all three height groups attributed positively loaded adjective ratings to the concept of "men of average height".

The means and standard deviations for the three subject groups ratings are as follows: short subjects ($M=3.89$, $SD=.467$), average height subjects ($M=3.99$, $SD=.601$), and tall subjects ($M=.427$, $SD=.735$). While all three groups report a less favorable attitude toward "men of short height", it is the tall subjects who report a significantly more negative attitude. These differences are graphically displayed in Figures 3 and 4. It is the tall subjects who view shorter males as being significantly more immature, conforming, incomplete, dirty, and not capable, than either of the other two subject groups.

There was also a significant difference in the way the groups rated "men of tall height" [$F(2,312)=5.55$ $p<.01$]. A Tukey follow-up test shows all pair wise differences are significant ($p<.05$) except for the differences between short and average height subjects.

The mean scores and standard deviations are as follows: for short subjects ($M=3.08$, $SD=.736$), average subjects ($M=3.40$, $SD=.601$), and tall subjects ($M=2.73$, $SD=.7387$). The significant difference between the tall subjects appraisal of "men of tall height" and that of the other two groups is rather striking and is reflective of generally

KEY:

- MEN OF AVERAGE HEIGHT
- * MEN OF SHORT HEIGHT
- △ MEN OF TALL HEIGHT

Figure 3

SEMANTIC DIFFERENTIAL: MEN OF SHORT HEIGHT

more positive feeling about their bodies that tall subjects have.

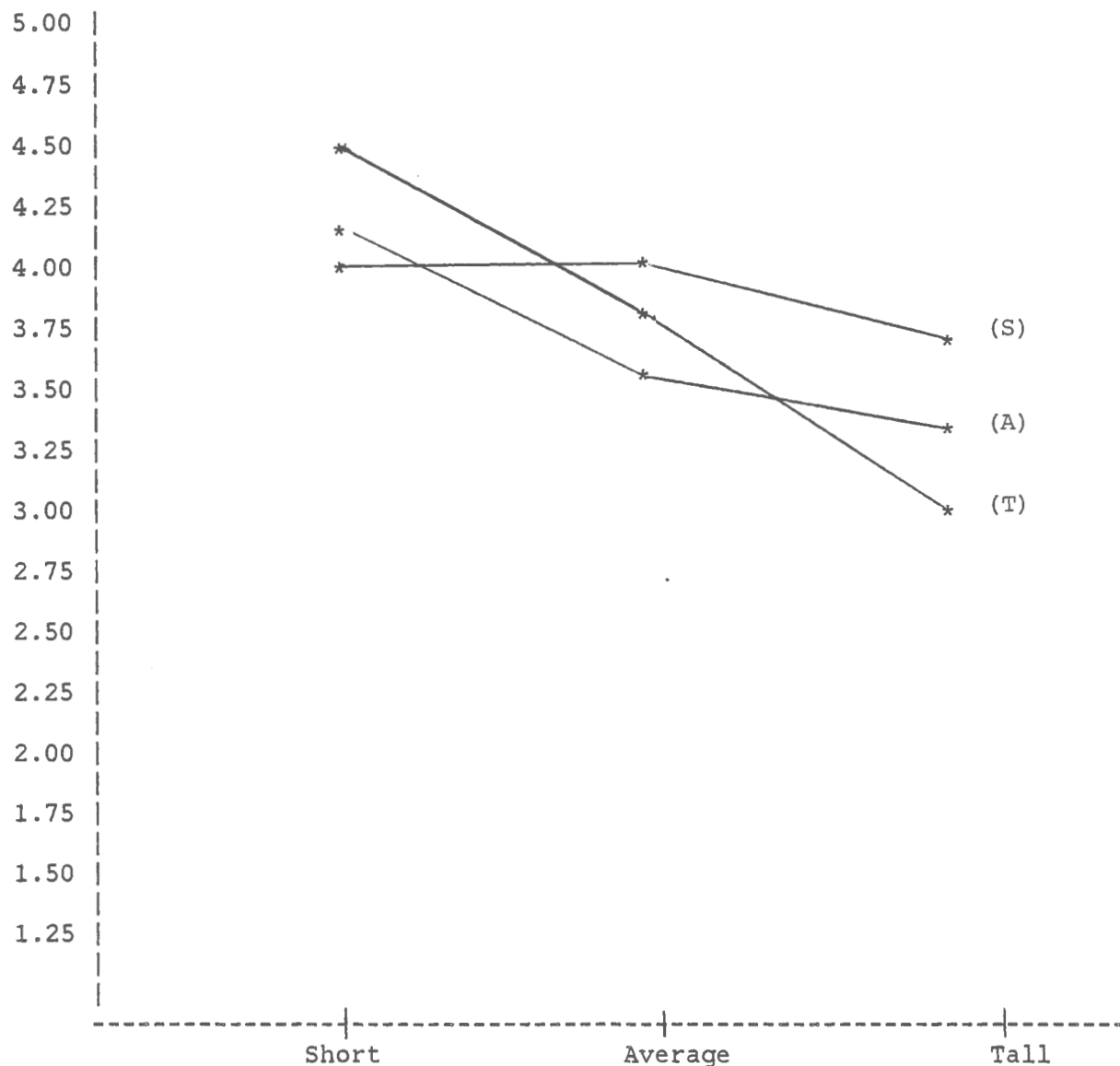


Figure 4
SEMANTIC DIFFERENTIAL HEIGHT RATED

more positive feeling about their bodies that tall subjects have. This may be seen in Figure 4 .

An analysis of the items reveals that the tall subjects view "men of tall height" as significantly ($p < .05$) more mature, uninhibited,

Table 42

ALL SUBJECTS RATING "MEN OF TALL HEIGHT": SEMANTIC DIFFERENTIAL
 AVERAGED SCALES. TUKEY (HSD) FOLLOW-UP TEST

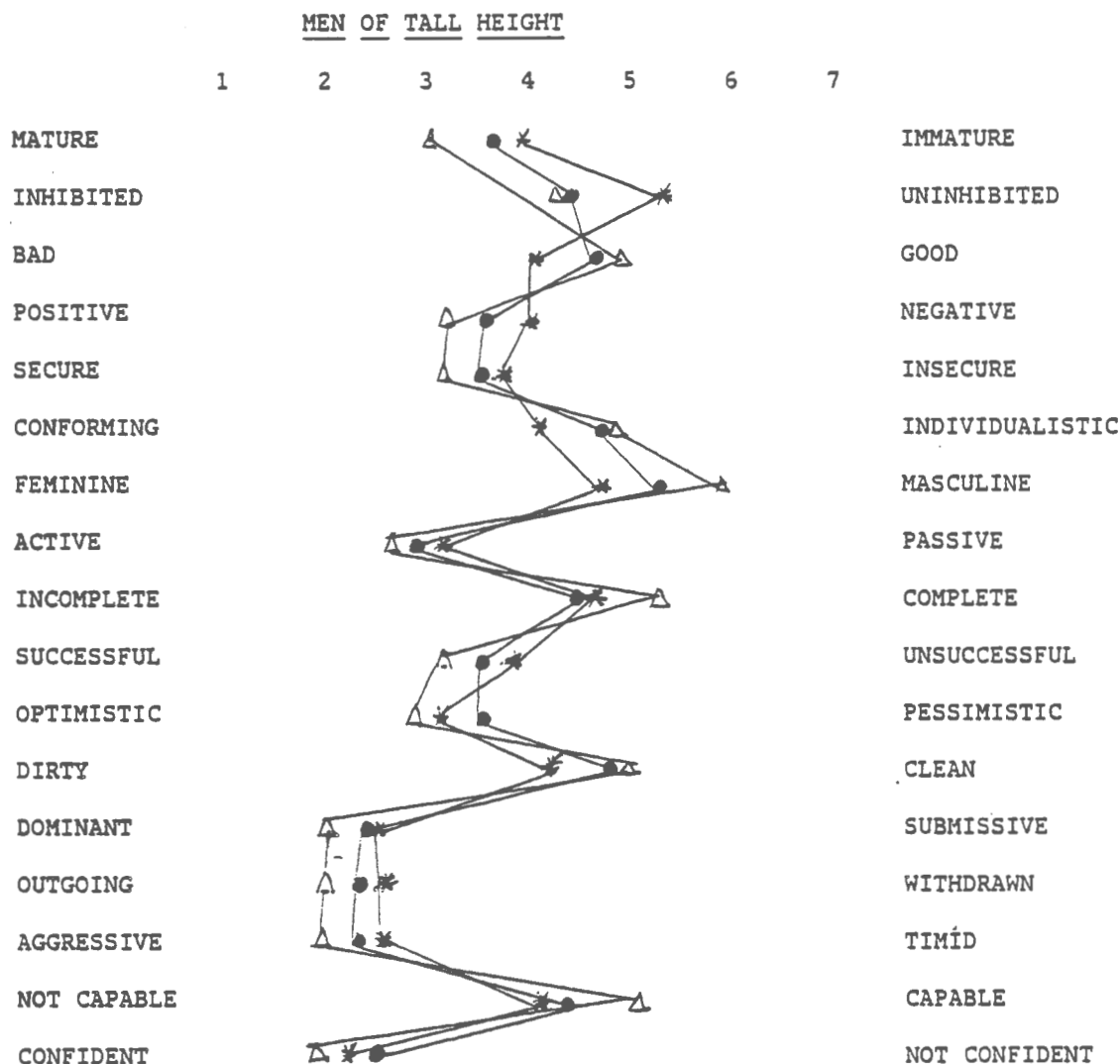
<u>Subjects</u>		
Short	Average	Tall
2.73	3.08	3.21
	.35	.48*
		.13*

* p<.05 c.v. = .20		

good, positive, masculine, successful, optimistic, and capable than the "men of short height". This is seen in Figure 5. It is interesting to note that tall subjects are highly cathected to their own height category. This result would be anticipated as tall height is a highly valued physical characteristic.

The semantic differential data was also collapsed along the Evaluation, Potency, and Activity factors as outlined by Osgood, Suci, and Tannenbaum (1957). The results of the ANOVA and Tukey follow-up tests for Main effects using 120 subjects reveals significant differences that are analogous to the results of the item-by-item and averaged analyses. The mean factor scores for rated height may be seen in Table 43 .

The main effect for rated height on the Evaluation factor was significant [$F(2,232) = 47.11, p<.001$]. Tukey follow-up tests revealed that "men of short height" were seen less favorably on this factor than either of the other two height groups ($p<.05$). The reader may

KEY:

- MEN OF AVERAGE HEIGHT
- * MEN OF SHORT HEIGHT
- △ MEN OF TALL HEIGHT

Figure 5
SEMANTIC DIFFERENTIAL: MEN OF TALL HEIGHT

Table 43

MEAN FACTOR SCORES FOR MAIN EFFECTS ON THE SEMANTIC DIFFERENTIAL DATA

(N=170)

Factor	Men of Short Height		Men of Average Height		Men of Tall Height		Tukey Follow-up Test Summary
	M	SD	M	SD	M	SD	
Evalua- tion	3.86	.537	3.19	.602	3.18	.625	S > T & A ($p < .05$)
Potency	4.13	.992	3.27	.640	2.64	1.05	All Pairwise Differences Significant S>A>T ($p < .05$)
Activity	4.09		3.46		3.00		All Pairwise Differences Significant S>A>T ($p < .05$)

remember that the Evaluation factor refers to the construct of "goodness". These results are seen in Tables 44 and 45 .

Table 44

ANOVA FOR MAIN EFFECTS FOR RATED HEIGHT: EVALUATION FACTOR

Source	SS	df	MS	F	P
Rated Height	36.793	2	15.396	47.11	<.001
Error	90.598	232	0.390		

Table 45

TUKEY (HSD) TEST: EVALUATION FACTOR

<u>Subjects</u>			
Tall	Average	Short	
3.18	3.19	3.86	
	.01	.68*	S > T and A
		.67*	

* p<.05 c.v. = .192			

The main effect for rated height on the Potency factor was also significant [$F(2,236) = 88.25, p<.001$]. The Tukey follow-up tests revealed that all pairwise differences are significant ($p<.05$) with "Men of Tall Height" being seen as most potent, "Men of Average Height" being seen as less potent," and "Men of Short Height" being seen as less potent. The Potency factor is interpreted as "strength" and strongly associated with masculinity. These results are seen in Table 46 and 47 .

Table 46

ANOVA FOR MAIN EFFECTS FOR RATED HEIGHT: POTENCY FACTOR

Source	SS	df	MS	F	P
Rated Height	135.98	2	67.99	88.25	<.001
Error	181.82	236	.7704		

Table 47

TUKEY (HSD) TEST: POTENCY FACTOR

<u>Subjects</u>			
Tall	Average	Short	
2.64	3.27	4.13	
	.63*	1.49*	All pairwise differences are significant
		.86*	
* p<.05 c.v. = .268			

The main effect for rated height on the Activity factor was significant [$F(2,234) = 37.11, p<.001$]. Regarding the Activity factor, all pairwise differences are significant with "Men of Short Height" being seen as least active or most passive, "Men of Average Height" being seen as more active or less passive, and "Men of Tall Height" being seen as significantly more active or least passive. These results are seen in Tables 48 and 49

Table 48

ANOVA FOR MAIN EFFECTS FOR RATED HEIGHT: ACTIVITY FACTOR

Source	SS	df	MS	F	P
Rated Height	71.96	2	35.98	37.11	<.001
Error	226.86	234	0.97		

Table 49

TUKEY (HSD) TEST: ACTIVITY FACTOR

<u>Subjects</u>			
<u>Tall</u>	<u>Average</u>	<u>Short</u>	
3.00	3.46	4.09	All pairwise differences are significant S > A > T p<.05
	.46*	1.09*	
		.63*	

* p<.05 c.v. = .302			

With the exception of the Activity factor, significant interactions on the factor scores were also found [$F(4,236) = 9.66, p<.001$]. These result are seen in Table 50 .

Table 50

ANOVA OF INTERACTION EFFECTS FOR SEMANTIC DIFFERENTIAL FACTOR SCORES

Source	SS	df	MS	F	P

<u>Evaluation</u>					
Interaction	15.098	4	3.772	9.66	p<.001
Error	90.598	232	0.390		

<u>Potency</u>					
Interaction	10.202	4	2.55	3.31	p<.05
Error	181.82	236	.770		

<u>Activity</u>					
Interaction	2.08	4	0.52	0.54	n.s.
Error	226.86	234	0.97		

A simple effects test on the potency factor was conducted. The results of the simple effects test reveals that short subjects significantly differentiate between the height categories [$F(2,236)=15.87$, $p<.001$]. The Tukey (HSD) Follow-up test (Table 51) reveals that "men of short height" are rated higher than either of the other two height designations. That is, short subjects rate "men of short height" as less potent than the other two groups. This result is probably indicative of lower body cathexis and body satisfaction that this subject group has.

Table 51

TUKEY HSD TEST: SHORT SUBJECTS RATE HEIGHT GROUPING ON POTENCY FACTOR

Rated Height		
Tall	Average	Short
2.87	3.28	3.95
	.41	1.08*
		.67*

* $p<.05$

The simple effects test of the Potency factor for average height subjects was also significant [$F(2,236) = 30.58$, $p<.001$]. The results of the Tukey (HSD) follow-up test reveals that the average height subjects also rate the short subjects as least potent while not significantly differentiating between "men of average height" and "men of tall height." This is seen in Table 52 .

Table 52

TUKEY HSD TEST AVERAGE SUBJECTS RATE HEIGHT GROUPINGS ON POTENCY
FACTOR

<u>Rated Height</u>		
Tall	Average	Short
2.65	3.05	4.13
	.40	1.48*
		1.08*
* p<.05		

The simple effects test on the Potency factor for tall subjects was also significant [$F(2,236) = 48.03, p<.001$]. Tukey (HSD) test revealed that 'men of short height' are viewed as least potent. In this instance, the tall subjects rated 'men of average height' as significantly less potent than 'men of tall height.'

In fact, the tall subjects felt very positively about their own height. This most likely reflects a high degree of body satisfaction and positive body cathexis. The results are seen in Table 53

The interaction between the subjects' heights and the rated height on the Evaluation factor was found to be significant ($F[4,232] = 9.66, p<.001$). In this case, the short subjects did not differ in how they rated the three categories ($F[2,232] = 2.71$), while the other two subject groups did differentiate.

Table 53

TUKEY HSD TEST: TALL SUBJECTS RATE HEIGHT GROUPING ON POTENCY FACTOR

<u>Rated Height</u>		
Tall	Average	Short
2.38	3.48	4.30
	1.10*	1.92*
		.82*

* $p < .05$

The average height subjects did differentiate between the three height categories on the Evaluation factor [$F(2,232) = 14.79, p < .001$]. The results of the Tukey (HSD) test reveals that the average height subjects rated "men of short height" significantly lower than either of the other two groups. These results are seen in Table 54 .

Table 54

TUKEY HSD TEST: RESULTS OF AVERAGE HEIGHT SUBJECTS ON THE EVALUATION FACTOR

<u>Rated Height</u>		
Tall	Average	Short
2.97	3.24	3.72
	.27	.75*
		.48*

* $p < .05$

For the tall subjects, the results of the simple effects test was also significant [$F(2,232) = 48.38, p < .001$]. The results of the Tukey

(HSD) test reveal that tall subjects rate 'men of short height least positively, "men of average height" more positively and "men of tall height" most positively. All Pairwise differences are significant. It appears that the tall subjects have a very unfavorable opinion of short males. These results are seen in Table 55 .

For a visual representation of the simple effects test on the potency and evaluation factor the reader is referred to Figure 6 .

Table 55

TUKEY HSD TEST: RESULTS OF TALL HEIGHT SUBJECTS ON EVALUATION FACTOR

Tall	<u>Rated Height</u> Average	Short
2.82	3.21	4.18
	.39*	1.23*
		.97*

* $p < .05$

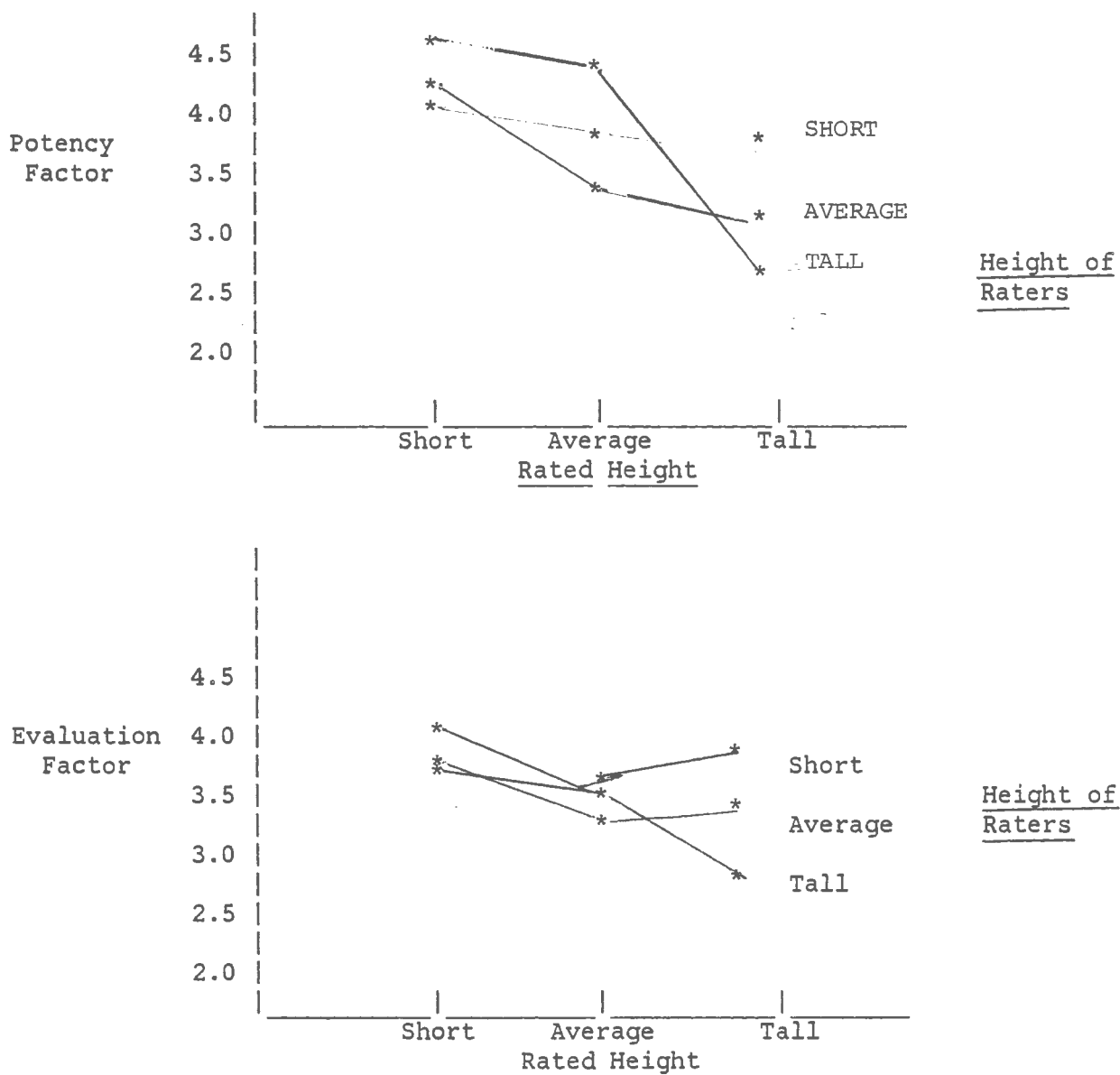


Figure 6
SIMPLE EFFECTS TESTS FOR FACTOR SCORES OF SEMANTIC DIFFERENTIAL MEASURE

5.6 THE ACTIVITY VECTOR ANALYSIS (AVA)

One of the predictions posited in this study was that men of different height will vary on the construct of self-concept. The Activity Vector Analysis was used to assess the construct of self-concept in this study. The individual subject profiles were scored according to the directions outlined in the AVA manual (Walter V. Clarke Associates, Inc., 1973) with the raw scores, converted scores, pattern shapes, activity scores and congruence indices calculated for each subject.

As noted in a previous section, within the AVA system, a pattern shape refers to one of 258 specific coded AVA profiles and each profile reflects the relative strength and magnitude of each of four vectors. These four vectors are labeled (1) Aggressiveness, (2) Sociability, (3) Emotional Stability, and (4) Social Adaptability. The profiles are coded on a scale of 1-9 with the ipsitive mean being set at 5. There must be at least a 1 or a 9 in the coded pattern. The sum of them must equal 20. Under these constraints there can be only 258 pattern shapes.

Prior to the analysis of the AVA, the individual profiles were inspected for elevation and scatter. The scatter was determined by inspecting the deviation ratios and the graphs of pattern shapes. The deviation ratio is obtained by dividing the highest vector score by the lowest vector score on the Self, Role, and Image profiles. A resulting deviation ratio of less than 1.10 does not allow a confident analysis of the comparative vector strength within the integration.

Such subject profiles were not included in the analyses. As noted in the AVA manual (Walter V. Clarke Associates, Inc., 1973) it is at that point, with all vectors at about the ipsative mean that the subjects behaviour is difficult to describe. Conversely, a deviation ratio of 1.85 or larger indicates a degree of evasion. In addition, any pattern shapes that were based on too few adjectives checked (i.e. < 6) or too many (i.e. > 70) were not included in the analyses.

Six dimensions of self-concept, as measured by the AVA were utilized in this study. First, the SOCIAL SELF

(Role), which is defined as one's perception of how he feels he is being seen by others. It is the self-concept through which a person perceives how he needs to behave in order to meet the demands of social living. Second, there is the BASIC SELF, which is defined as one's perception of how he really thinks he sees himself. Third, is the IMAGE, which is how the person is likely to be perceived by others. Fourth is the IDEAL SELF, or the subjects's view of the perfect person. Fifth, is the concept of CONGRUENCE which is a measure of the consistency between one's Social Self and one's Basic Self. Finally, is the construct of ACTIVITY, which refers to the degree of aliveness, vitality, energy, or responsiveness to the environment.

As mentioned, the scoring of the individual responses was completed according to the AVA Manual. Activity scores were obtained by simply counting the total number of responses checked and then transcribing this number to the converted score (ordinary standard score scale with $M = 50$ and $SD = 10$). Scoring for each vector is obtained by

counting the number of responses that load on that particular vector and then transforming the raw to the converted score. The Congruence score, which is defined as the relationship between the variables of the pattern shapes for the Self and Role, is obtained by calculating the Pearson-type correlation between the two profiles.

The Social Self (Role), Basic Self, Image and Ideal Self constructs are analyzed by comparing group centroids for each of the three height groups on these constructs. As already mentioned, the group centroids form the middle of an identifiable cluster with the criterion for inclusion into any given cluster being at least a correlation of .69 between the group centroid and any individual pattern shape.

The first analysis completed was that of the Basic Self. For the average height group, the centroid was the pattern shape 4349. Thirty three percent of the subjects were included within this cluster. The profile 4349 falls squarely within the influence of Vector 4. Individuals within the influence of a high Vector 4 may be described as cautious, suggestible, compliant, and conforming. They may be viewed as dependent-follower types of personalities. They are not generally leaders and they perform best and feel most comfortable in situations which call for strict adherence to rules or instructions. (Manual for the AVA, 1973). This is seen in figure 7 .

The short height group profiles for the Basic Self also clustered solidly within the Vector 4 influence. In fact, 49% of the short height group were included within this cluster, reflecting a tighter grouping than that of the average height subjects. That is, signifi-

cantly more of the short subjects were more distinctly within the influence of the high Vector 4 pattern. This may be seen in Figure 8 .

Analysis of the tall height subject profiles for the Basic Self revealed a wide dispersion within the northern hemisphere of the AVA universe. There were no identifiable clusters, reflecting much greater variance than either of the other two height groups.

Analysis of the Social Self (Role) data reveals that 38% of the average height subject profiles cluster about pattern shape 6815. This cluster yields a high Vector 2 and low Vector 3 influence. This kind of individual may be described as sociable, gracious, and persuasive. He is enthusiastic, but this is also the kind of person who may tend to get carried away by his own hearty manner and high spirits. Because of this, he may at times be considered a thoughtless person. This constellation is seen in Figure 7 .

The short height subject profiles on the Social Self clustered around pattern shape 4349 with 40% of the short subjects included within this cluster. This pattern shape is well within the influence of Vector 4 and it is basically the same pattern as for this group's Basic Self image. As already mentioned, this is the kind of person who is highly dependent on others for guidance, assurance, and direction. this person finds it difficult to make independent decisions and is one who works best when instructions and directions are laid down. Such a person is anxious and is likely to be a worrier, especially concerning actions which he has taken. There is a great tendency in these people to be meticulous, fastidious, and punctilious.

They do careful and accurate work and they take great precautions not to deviate from established rules and guidelines (Merenda & Berger, 1978). This constellation is seen in Figure 8 .

The pattern shapes of tall subjects on the Social Self were once again scattered throughout the northern hemisphere of the 258 AVA pattern Universe with no distinct clusters (that is, composed of at least about one-third of the subjects in any particular group).

On the Image construct, the average height subjects were divided between two clusters. The pattern shape centroids for these two clusters were pattern shapes 3349 and 4817. It is important to note that these two centroids are not polar opposites but do share the common element of a low Vector 3 influence. This type of individual is described as being very expressive. These persons are not the kind of people who tend to worry about things until they happen. They do not tend to plan well due to their proneness to impulsivity. (AVA Manual, 1973). This constellation is seen in Figure 9 .

The short height subjects were once again clustered within the high Vector 4 influence on the Image construct. This group centroid of pattern shape 5429 included 54% of the short height subjects making it a rather tight cluster. This pattern shape reflects a high Vector 4 and low Vector 3 influence. This constellation is seen in Figure 11 .

The tall height subjects were without a distinct cluster on the Image construct. As with the Basic Self and Social Self results for this group, the majority of pattern shapes (92%) were scattered within

the northern hemisphere of the AVA Universe. It should be noted that in the normative sample of the AVA there is approximately equal saturation throughout the AVA universe. The sample of tall subjects then, is rather different than the general population on this measure.

Taking a closer look at the different personality constellations associated with a northern or southern hemisphere dominance it is found that the northern hemisphere of the AVA is characterized by such traits as high dependency, impulsivity, high sociability, and a greater passivity and lack of initiative.

This is in contrast to the personality constellation associated with a southern hemisphere dominance. Such an individual would be more assertive and independent while not being as "people-oriented." He would tend to be calm, think things out, and more of a leader type.

AVERAGE: Self and Role

AVA PATTERN UNIVERSE

PROJECTED A.V.A. OF THE SPHERICAL UNIVERSE OF THE PATTERN SHAPES

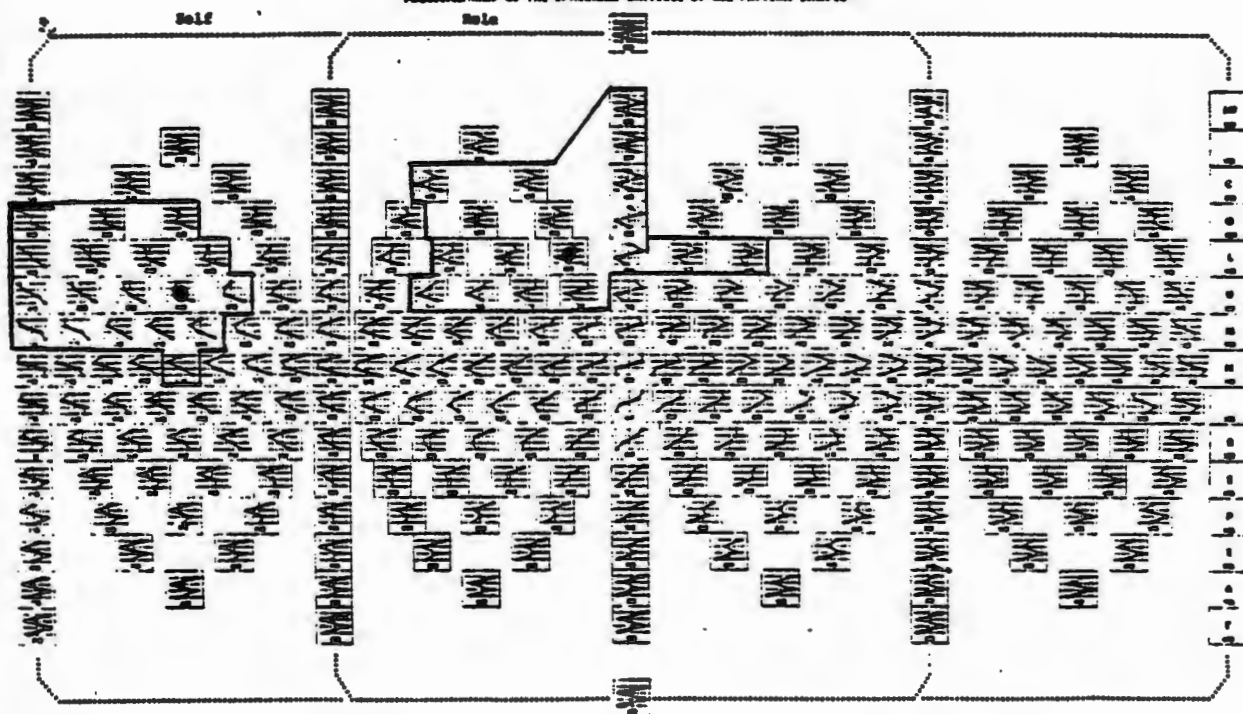


Figure 7

AVA SELF-CONCEPT AND SOCIAL SELF-CONCEPT FOR AVERAGE HEIGHT SUBJECTS

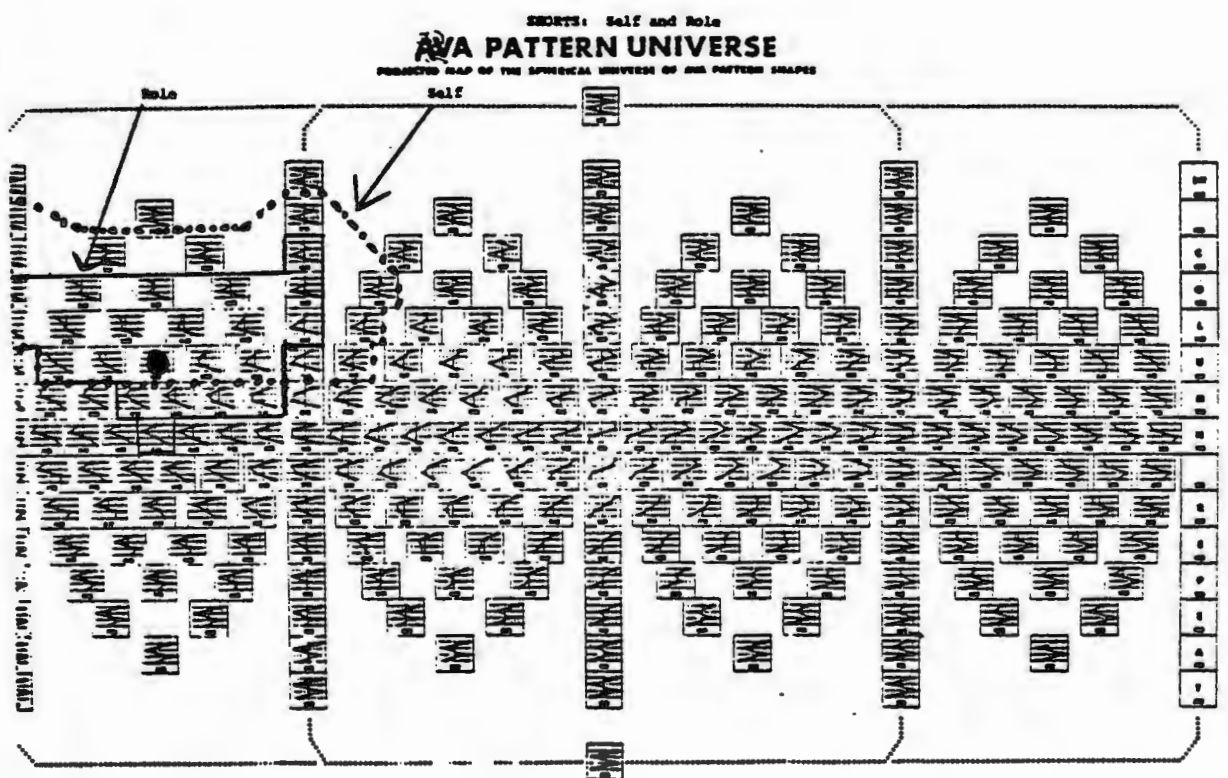


Figure 8
AVA SELF-CONCEPT AND SOCIAL SELF-CONCEPT FOR SHORT SUBJECTS

AVERAGE: Image

AVA PATTERN UNIVERSE

PROJECTED MAP OF THE SPHERICAL UNIVERSE OF AVERAGE PATTERN SHAPES

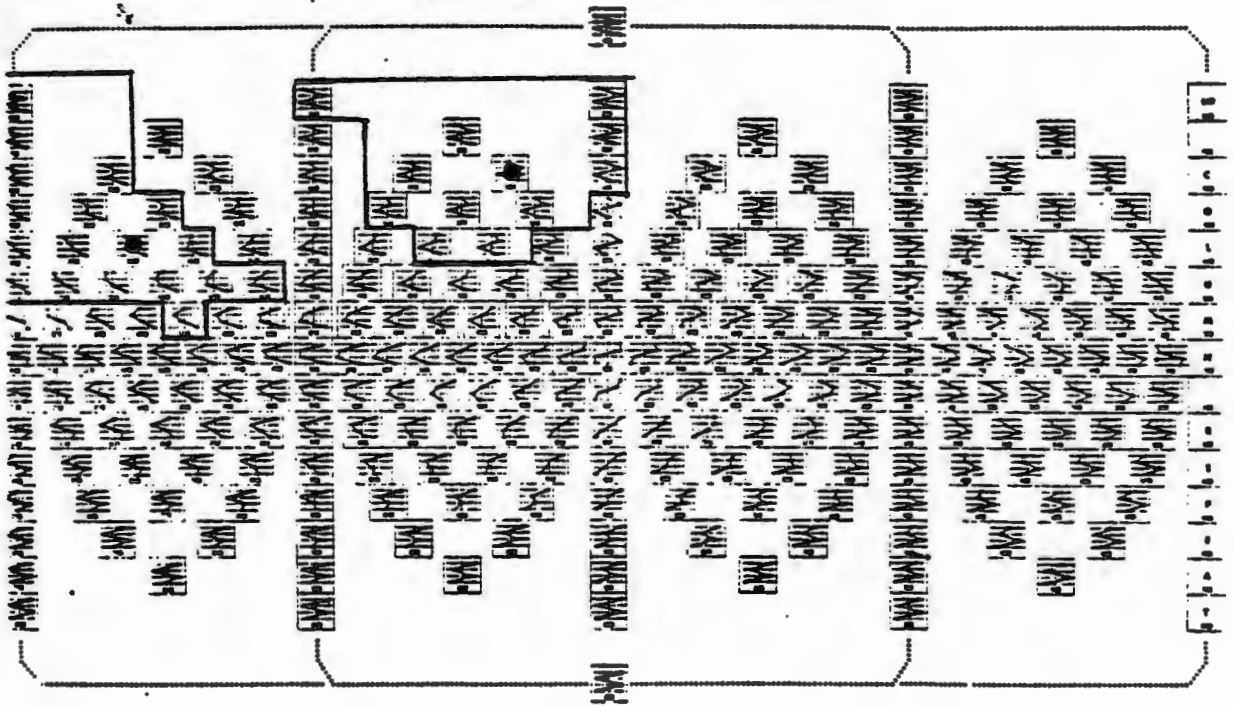


Figure 9
AVA IMAGE PATTERN CLUSTER FOR AVERAGE HEIGHT SUBJECTS

SHORTS: Image

AVA PATTERN UNIVERSE

PROJECTED MAP OF THE SPHERICAL UNIVERSE OF AVA PATTERN IMAGES

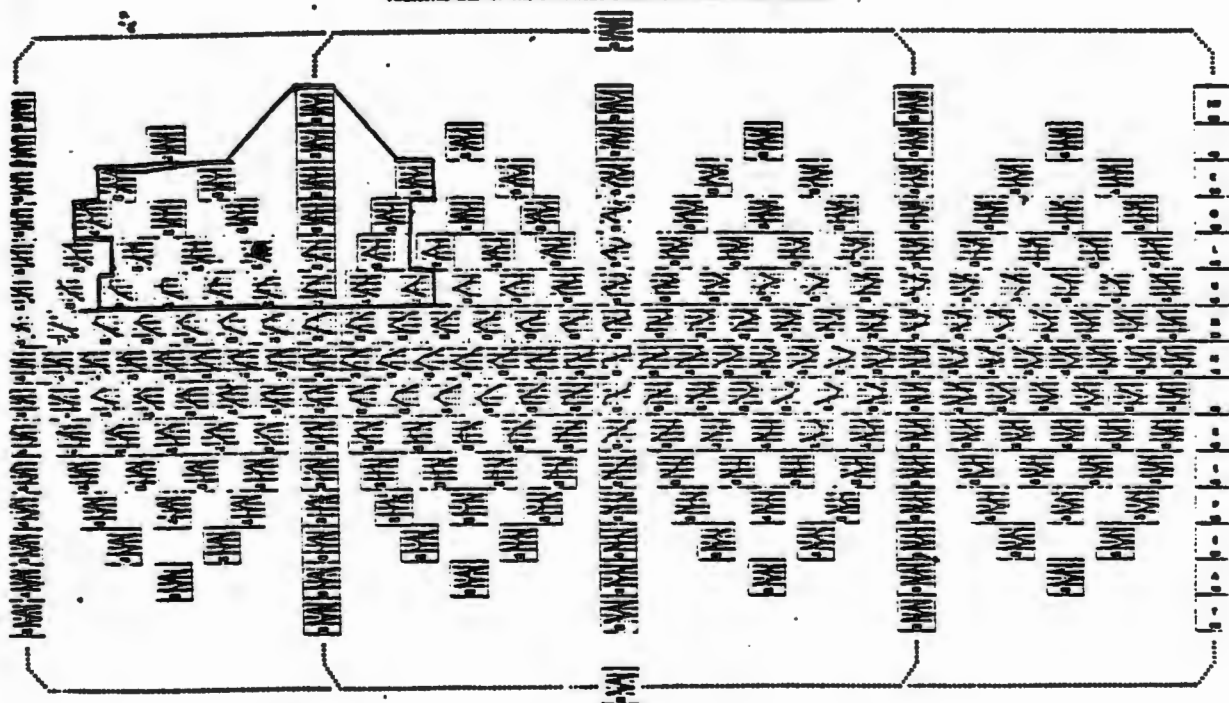


Figure 10
AVA IMAGE PATTERN CLUSTER FOR SHORT SUBJECTS

What is most interesting in these results, for the purposes of this study is the pronounced consistency in the Basic Self, Social Self, and Image profiles for the short group. While the average height group is similar to the short height group on the Basic Self profile, they believe that they present a more sociable facade to others. And in turn, they believe that others see them in that way.

The short subjects on the other hand, think of themselves as "Highly dependent" and they believe that others see them this way. In fact, the image profile for the short subjects are likely to be perceived by others. Given the predominant influence of Vector 4 on the Basic, Social, and Image profiles, one would expect such individuals to be more contained, take fewer interpersonal risks, and be more concerned about how others see them. Such an interpretation would be consistent with the results on the other measures in this study.

Data from the tall subjects is difficult to interpret, as there are no identifiable clusters. As was the case for the short and average height subjects, the tall group is characterized by dependency, impulsivity, and sociability. This makes them most similar to the average height subjects.

The results of the analysis of the Ideal Self data is rather interesting in that they did not mirror the results of previous AVA research on the Ideal Self. Previous research with the AVA has found that the "ideal" male self-concept is that of a "Jack Armstrong, All-American Boy" stereotype (Merenda, 1961, 1964, 1979; Merenda and Clarke, 1959; Merenda et. al., 1971, 1975; Merenda and Mohan, 1966;

Merenda and Shapurian, 1974). This type of ideal person may be described as:

one who is at his best in a situation requiring smooth performance. He is relatively passive but friendly and is widely attracted to a wide variety of people. He is a charmer who is politically astute and is successful in getting others to go along with his view.

(Merenda and Shapurian, 1974, p. 1208)

It is of particular interest for the purpose of this study to note that Merenda (1961) found that, in the process of acquiring a higher education "college students tend to also acquire a stereotyped set of self-concepts. The stereotype is characteristic of a relatively passive, non-aggressive, socially confident person (p. 59). He concluded that these stereotyped self-concepts are assumed to be reflections of an attitude toward social behaviour which college students acquire through the process of acculturation in the school setting where the desirability of possessing these ideal traits is likely to be imposed by the family and fellow students (p. 59).

In the present study, the analysis of Ideal Self, data reveals that there is a remarkable similarity among the three groups. The composite profile of the entire sample clustered about pattern shape 4871. While this pattern shape is quite similar to the Ideal pattern shapes in previous studies, it is also different in a notable way. Table 56 shows the correlations between ideal self-concept generated in this study and ideal self-concept generated by seven other studies (Merenda, 1964; Merenda and Mohan, 1966; Merenda and Clarke, 1967; Merenda et al., 1970; Merenda et al., 1975). As may be seen in Table 56, the correlations between the present study and these seven studies are

generally positive, but do not approach a perfect correlation. A person with this AVA profile may be described as having a gregarious, sociable and empathic, as well as sympathetic attitude toward the needs of others.

Table 56

CORRELATIONS OF IDEAL SELF-CONCEPT WITH THE PRESENT STUDY

Study Number	Correlation	Pattern Shape
1	.52	1955
2	.74	4943
3	.52	1955
4	.37	3935
5	.74	4943
6	.51	4934
7	.74	4943
Present	1.00	4871

He has a great deal of personal appeal and he gives the impression of being genuinely interested in other people. He is a warm and friendly person who has the capability to make others feel comfortable in his presence. This pattern shape reflects a high Vector 3 influence and this finding was consistent across the three groups. This Ideal Self cluster may be seen in Figure 12 This profile reflects what appears to be the integration of what have traditionally been thought of as "fem-

inine" traits. That is, what we may be seeing is a movement towards androgeny (Kaplan and Sedney, 1980; Sargent, 1977; Singer, 1976).

DISTRIBUTION CHART
AVA PATTERN UNIVERSE
 PROJECTED MAP OF THE SPHERICAL UNIVERSE OF AVA PATTERN SHAPES

1951

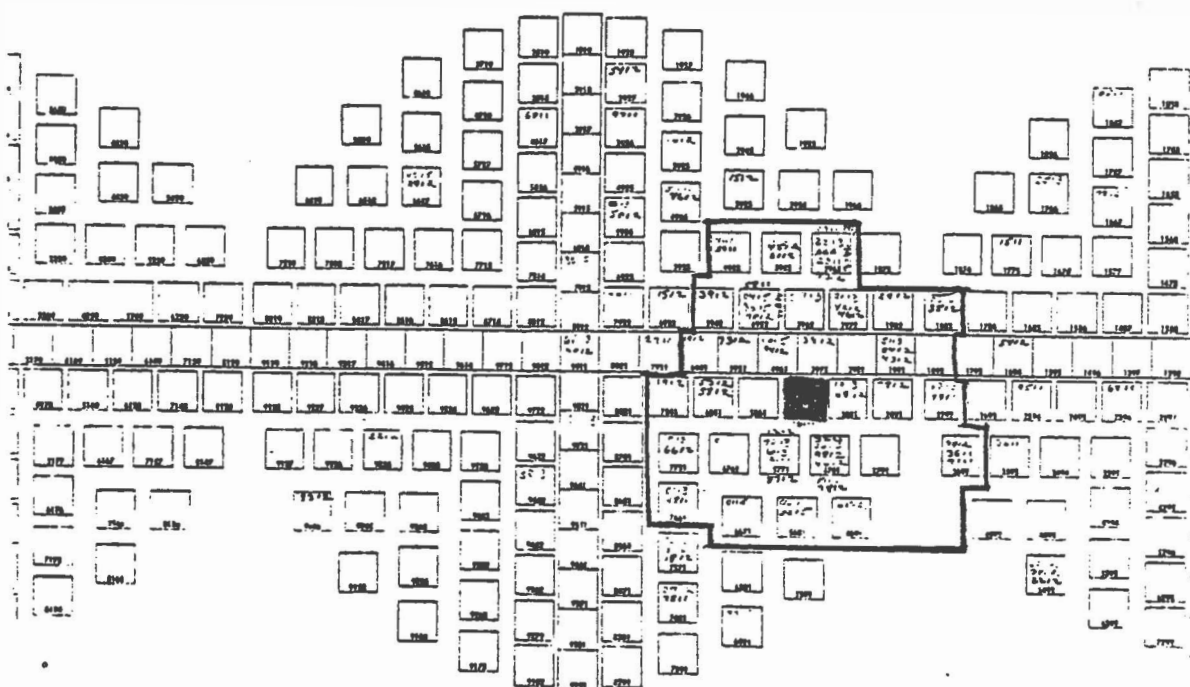


Figure 11
PATTERN SHAPES OF IDEAL SELF-CONCEPT FOR THE ENTIRE SAMPLE

As mentioned earlier in this section, the construct of Activity in the AVA refers to the degree of aliveness, vitality, energy, or responsiveness to the environment which an individual exhibits (Clarke, 1967). It is an assumption of the AVA that,

Individuals with high energy levels clearly demonstrate greater endurance, dynamic behaviour, greater alertness and awareness, greater vitality, greater mental capacity, more efficient behavior, greater resistance to disease and usually more productive and successful lives than individuals with low energy (Manual for the AVA, 1973, p. 10-8)

The Activity levels for the three subject groups were analyzed for both the Self and Role profiles. The ANOVA results between groups did not attain significance in either of these analyses [Activity Self: $F(2,122)=.25$, n.s.; Activity-Role: $F(2,122)=1.03$, n.s.]. These results may be seen in Table 57

Table 57

ANOVA FOR AVA DATA: ACTIVITY-ROLE

	SS	df	ms	F	P
Between Group	295.115	2	147.55	1.03	n.s.
Error	17453.55	122	143.06		

The Activity level for the group as a whole is within the range (converted scores about 50) as measured by the AVA (Manual for the AVA, 1973, p. 4-4). The sample mean ($N=125$) is 51.57 on the Activity-Role and 53.5 on Activity-Self. The group means and standard deviations may be seen in Table 59

Table 58

ANOVA FOR AVA DATA: ACTIVITY SELF

	SS	df	ms	F	P
Between Group	87.606	2	43.803	0.25	n.s.
Error	21183.593	122	173.636		

The construct of Congruence is defined as the relationship between the pattern shape for the Self and the pattern shape for the Role, expressed in terms of a correlation coefficient. The congruence score is actually a modified correlation coefficient which is computed using a modified Pearsonian formula (Whisler, 1957). The correlation coefficient between any two pattern shapes may be found in the AVA Correlation Tables. The result is a scale by which degrees of consistency between Self and Role can be determined.

A Congruence score of around .70 indicates inconsistency between the subject's Self and Role. A high Congruence (Between .95 to 1.0) indicates a minimum range of behaviour. It is seen as rigid, lacking flexibility (Manual for the AVA, 1973, p. 10 - 37).

In the present study the Congruence scores were obtained by first correlating the subject's AVA for Self with Role. The r values that resulted were transformed into z scores and the z scores were averaged for each group. the resulting means were used in a between group ANOVA. The z scores were then transformed back into r scores, as the Congruence score is actually a modified correlation coefficient.

Table 59

GROUP MEANS AND STANDARD DEVIATIONS FOR AVA DATA

Group	1	2	3
Activity- Role Mean	53.06	49.42	51.97
Standard Deviation	11.07	11.38	13.51
Count	47	40	38
Activity- Self Mean	54.19	52.27	53.86
Standard Deviation	12.39	13.23	14.07
Count	47	40	38
Congruence Z Mean	1.26 (.85)	1.33 (.87)	1.03 (.77)
Standard Deviation	0.75	0.85	0.79
Count	47	40	38

() = r equivalents of z

The ANOVA results, as seen in Table 60 did not attain statistical significance [$F(2,122)=1.57$, n.s.]. The means and standard deviations, seen in Table 59 reveals that the sample, as a whole reports congruence between self and role that reflects consistency and some flexibility.

Table 60

ANOVA FOR AVA DATA: CONGRUENCE

	SS	df	MS	F	P
Between Group	1.980	2	0.990	1.57	n.s.
Error	77.138	122	0.632		

5.7 DISCUSSION

The present study sought to provide empirical support for the hypothesis that physical stature is significantly related to an individual's self perceptions, self-concept, body satisfaction, and feelings of psychological security.

Body Satisfaction

The results of this study supported the prediction that short males would be significantly less satisfied with the overall appearance of their bodies than either of the two other height groups. The degree of body cathexis did not significantly differ between the average height and tall groups. It appears that short subjects do, in fact, experience less satisfaction with their bodies than their taller peers. Moreover, the fact that the tall and average height subjects do not significantly differ in their overall body cathexis scores supports the idea that height, as a predictor of body cathexis, diminishes in importance when one is of at least average height. It is those who are farthest from the cultural ideal for height that are most aware of the role that "insufficient" height plays, thereby affecting the view that they hold of themselves.

Self-Concept

The prediction that short males would demonstrate a less favorable self-concept was substantially supported. What is most striking about the results on the Activity Vector Analysis is the way in which the short subject group's pattern shapes for Basic Self, Social Self, and Image all clustered within the vector four influence.

Such was not the case for the other two height groups.

That is, the short group's centroids for Basic Self, Social Self, and Image were virtually the same, indicating that they viewed themselves, felt others viewed them, and were likely to be viewed by others as "dependent-follower" type personalities. This might be interpreted to mean that the short subject has a pronounced tendency to be more interpersonally constrained and is apt to take fewer interpersonal risks. He is the kind of individual who is very concerned about how others see him. As a result, the short male is less apt to take on a leader role. Such a role would require both interpersonal risk and assertive behavior.

This result fits well with much of the literature reviewed for this study. The short male grows up with his body being perceived by self and others as less than satisfactory. During pivotal developmental years, when acceptance of the body as a symbol of the self is most crucial, the short male may feel less secure about taking interpersonal risks, he is less successful in competitive sports, and he is less successful in gaining peer acceptance. All in all, he may be unable to feel that his body is a positive symbol of the self. Given this, it should not be unexpected that the short male reports being a "dependent-follower" personality type.

The average height subjects demonstrated greater variability among the Basic Self, Social Self, and Image constructs. They too saw themselves as being more like a "dependent-follower" personality type, but they believed that others saw them as being more sociable and outgoing. The results of the Image profile were consistent with this

belief. This is an important difference from the short group because it demonstrates greater flexibility and social skills.

The tall subject group was most variable in their response pattern, yielding no identifiable clusters. The tall group felt most positively about itself on the Body Cathexis Scale and the Semantic Differential measure. As mentioned in a previous section, height probably becomes a less potent predictor of personality correlates and attributes as height increases. For the tall group, the issue of height is not a salient issue.

Regarding the ideal self-concept, the three height groups did agree on what characteristics the ideal person would possess. It appears that what are thought of as ideal male traits are undergoing a major shift. Unlike previous AVA self-concept studies, this group no longer aspired to attain the "Jack Armstrong, All American Boy" ideal. Rather, the ideal self-concept that this group chose was of an individual who is not just superficially sociable, but has a genuine interest in other people. That is, the broader social changes in male and female roles seem to be influencing the male view of what is "masculine". John Naisbett, author of Megatrends and a researcher who follows such changes in American life, recently commented that just such a change was indeed a trend (Time Magazine, July 23, 1984, p.104). Naisbett believes that men are adopting more "feminine" characteristics, such as sensitivity. He believes that this readjustment of sex roles is "probably the most important thing that's going on in this century in America." This is what is probably being reflected by the results of this study.

Psychological Security

The prediction that short males would report experiencing greater psychological insecurity than their taller counterparts was not supported. All three of the height groups reported a mean level of psychological security that was well within the "normal" range on this measure. One plausible reason for the failure to attain statistical significance is that the Maslow Psychological Insecurity Inventory is too broadly based, tapping a too general range of the psychological insecurity construct. The seventy-five items range from descriptions of the most extreme symptoms of psychological insecurity to the most mild of symptoms. The fact that each item is equally weighted means that two people with a very different symptom constellation (one mild and one severe) could attain the same score. Hence, given a normal sample, such as was used in this study, the test lacks in discrimination unless one group has pronounced psychopathology. Such pronounced psychopathology was not anticipated, nor was it evident.

Most likely, there is a specific constellation of symptoms and feelings that is indicative of psychological insecurity for the short subjects. As the results of the self-concept measure revealed, the short subjects view themselves as more withdrawn and self-conscious, and believe that others see them this way. Such a result may be indicative of psychological insecurity, but the measure used was not sufficiently sensitive to indicate this.

Height's Impact in Daily Life

Self-Reports

The prediction that self-reported thoughts about the impact of height in an individual's daily life would be significantly more pronounced for the short male was substantially supported.

The short subjects do not report that their height has been of help socially and, in fact, they report that their height has significantly hindered them. The tall and average height subjects did not experience height as a factor that hindered them socially.

In the seven hypothetical situations aimed at assessing self-perceived comfort in situations where height comparisons might be made, four significant results were attained. In these four situations, the trend was that "talls" reported the greatest comfort and "shorts" reported the least comfort, revealing the important role of height comparison within the social context. In none of the seven hypothetical situations did short subjects report greater comfort than the other two height groups.

These results support the prediction that short subjects would experience less comfort or security in social situations. These results are consistent with the literature reviewed on self-esteem, power, and issues relating to height within the social context.

Height is seen in a relative way: it is within the social context that the short male must directly confront his own feelings about being "shorter than" and it is within the social setting that he must negotiate the derisive comments and behavior of others.

The short subjects' greater awareness of the importance of height in everyday life was reflected in their desire for the greatest amount of increase in height (mean = 6.1 inches).

As anticipated, short subjects believed significantly more strongly that a man's height was important in acquiring a dating partner. The other two height groups did not feel it was as important, once again indicating their lack of awareness of height as a key issue.

The impact of short stature on the subject's belief regarding his attractiveness vis-a-vis his peers once again revealed that the short subject felt significantly less attractive. This result is consistent with the significant difference on the Body Cathexis Scale.

It is likely that this self-perception of being less attractive is due in large part to the consistently negative response that the short male gets from others. In particular, the short male begins to view himself as others see him.

Perhaps most important is the way females view men of short height. Martel (1984) had 170 female college students complete three semantic differential measures aimed at assessing their opinions about men of different heights. As in the present study, the female subjects were asked to rate "men of average height", "men of short height", and "men of tall height" on seventeen paired adjectives.

The results clearly indicated that the female subjects had strong and consistently negative attitudes regarding men of short height. On

the other hand, men of average height and men of tall height were seen in consistently positive terms.

An item by item analysis of variance among the three semantic differentials was performed utilizing the PMDP2V computer program. The ANOVAs revealed significant differences ($p < .01$) across fifteen of the seventeen semantic differential items.

The female subjects find "men of short height" to be more immature, inhibited, negative, insecure, conforming, feminine, passive, incomplete, pessimistic, withdrawn, less successful, and less capable than either their average or taller male counterparts.

On three of the items there were significant differences between all three height categories, with "men of tall height" being seen as most dominant, aggressive, and confident, with "men of average height" significantly less so, and "men of short height" being the least so. On none of the seventeen items were "men of short height" rated more favorably than either of the other two categories. When data was collapsed along the Evaluation, Potency, and Activity factors, men of short height were rated more poorly on all three factors.

The results of the ANOVA and Tukey (HSD) follow-up tests for the three factor scores reveal significant differences that are analogous to the results of the item-by-item ANOVA. On the Evaluation factor, "men of short height" are evaluated less favorably than either of the other two groups ($p < .01$).

On the Potency factor, all pairwise differences were significant ($p < .05$), with "men of tall height" being seen as most potent, "men

of average height" being seen as significantly less potent, and "men of short height" being seen as least potent.

On the Activity factor, "men of short height" are viewed as significantly less active than the other two height categories.

This result reveals that females, like their male counterparts, tend to believe, and most likely communicate their belief, that men of short stature are not as attractive or masculine as their taller peers. Unfortunately, what Beigel (1954) wrote thirty years ago may be as true now as it was then: "shorter males, as a rule, do not strike the female as true men." These results clearly suggest that stereotyping, social discrimination, and attribution of personality characteristics based exclusively on the factor of height do, in fact, exist and can be measured. This study may be seen in Appendix K.

Interviews

In another study, Martel (in preparation) interviewed short males (5'5" or shorter) regarding the possible developmental problems and everyday issues confronting them. As a group, the short subjects presented a very strong awareness that their height made them significantly different than their taller counterparts. All reported an awareness that their short stature had a significant impact on their development, personality, and self-concept. All were aware that they had to compensate in some way for their stature.

The following excerpt from one interview serves to illustrate this point.

Interviewer: What kind of judgments do you think other people make about you based more or less exclusively on your height?

Subject: They are probably looking to see what I'm going to do to compensate for what I think my faults are in being short.

Interviewer: Why would you think that one has to compensate for this?

Subject: Because ... there is something lacking and physically it's height.... Something needs to be compensated for.

Interviewer: Do you compensate for it?

Subject: Maybe I do. I make a conscious effort not to stand very close to other people. I also make sure that I am standing perfectly straight.

Interviewer: Why do you think it is so important?

Subject: Because, from the beginning you want to present as standard a view of yourself as possible.

Interviewer: What do you mean, standard?

Subject: You want to be as middle of the road in everything until you get to see what this person you're confronting likes and dislikes.

This exchange was quite typical, revealing many of the elements commented on in the literature review. The subject is interpersonally wary, concerned about his "difference" and revealing a greater defensiveness than the question called for. Additional excerpts are contained in Appendix L.

Based on a preliminary analysis of the interview data, certain conclusions may be drawn with reasonable confidence. There were, in fact, some striking characteristics that were shared by most interview subjects. The interview results, seen in conjunction with both the

literature reviewed and the results of this study, support the possibility that there exists a distinct personality constellation that characterizes the short male.

The short male experiences his height as his "badge of identity". This "badge of identity" is negatively valenced and then cathected as an important aspect of the self-concept. The short stature, once internalized as part of the self-concept, becomes the core from which feelings of inferiority develop. Adolescence, a time when the self-concept and the body-concept are heavily overlapping, is a difficult time for the short male. It is at this time that he must confront his "deficiency" within the competitive sport and heterosexual realms. The result may be a denial of the importance of the body. The issues may be suppressed and repressed, but still remain unresolved and are carried into adulthood. What results is a shift to a more cerebral approach to life.

The cerebral approach serves two functions: First, it allows the short male to develop a sense of self-worth that is not based exclusively on the "inferior" body. Second, it allows for the development of a new role that may be experienced in a predominantly conflict-free ego sphere. Overall, the cerebral dominance is meant to serve an important equalizing function, while also protecting the individual from being overwhelmed by his feelings of inferiority. By diminishing his emphasis on the importance of the body, he should be able to focus emotional and intellectual energy elsewhere, thereby making a satisfactory adult adjustment. However, as was often the case in the interviews, there remains a less than conscious rage at having been "short-changed". The derivative form of this rage is

often manifested in sardonic humor. The humor of the short male will often have a sarcastic tint to it. The main purpose served is to express the underlying, perhaps unconscious rage in an oblique manner.

That is, the humor allows for the sparring with larger males while still remaining safe from physical harm. The short male will often have a rapier wit, which allows him to get his point across while not risking the possibility of any physical injury. As one interviewee noted: "My height protects me in some ways from physical aggression. It gives me some license to say things that I really feel without giving people a license to hit me." As the short male's physical survival may continue at the whim of the taller males, he cannot risk direct confrontation. To miss this essential point is to fail to understand the fundamental "sizing up" that exists in all interpersonal interactions. As one interview subject succinctly stated: "Both he and I know, if I go too far, he can always beat me up. This must have some effect on the way I act." It does seem to influence greatly the behavior of the short male by skewing his development enough to produce a unique character style.

The humor also serves to distract others from what the short male fears most: discussion of his short stature. As one interviewee said:

I kind of use humor like Judo or Aikido. If someone is making fun of me because of my height, I'll take it a step further than he did.

This response is reminiscent of Cyrano de Bergerac, who outdoes those who mock him.

One potential adaptation, which depends on the use of humor, is the clowning response. The clowning response is learned early in the short male's life. This adaptational style represents an implicit contract between the short male and those with whom he comes in contact. Since the short male will rarely be admitted to the desirable peer group based on physical prowess, he must barter for entry with a different currency. As part of the contract, he agrees to serve as the mascot of the group. The price of this bargain is that the short male remains permanently uncertain of the centrality of his membership in the group and must always continue earning acceptance.

Based on the interview data, the evidence points toward the conclusion that the short male is indeed insecure, but only within specified contexts. These situations might best be described as ones in which the individual is in unfamiliar social territory and with people with whom he is not well acquainted. The social context highlights and brings into sharp focus the male's short stature. The interviewees described these first meetings with others as the most difficult of tasks. They were acutely aware that, on first meetings, other people tend to think of them as "less than" or "not as significant as". These meetings become a proving ground, a field for the experience of tension and anxiety, an arena for the display of one's psychological defenses. As one interviewee responded to the question, "How would life be different for you if you were 5'10"?": "In general relations with people, there would be one less obstacle to overcome, or one less touchy subject to deal with in terms of meeting people."

In order to avoid attention to his height, the short male will, as one interviewee said, "present as standard a view of himself as possible." This fear of standing out represents a form of personal insecurity. It is as though, by not standing out, he believes that his short stature will not be noticed. It is both a self-deception and a collusion that exists between short males and their tall counterparts. It appears that both parties make an unspoken agreement not to mention the stature issue. Both agree to act "as if" there were no issue. Yet the avoidance is not successful. As one interviewee noted:

I've always been insecure meeting new people just because I know that the first thing they are going to remark upon is my height.

Why is short stature somewhat different than other deviant physical characteristics?

There is a surprisingly simple answer to this question. The important difference is that stature taps psychological conditioning felt by all and directly acknowledged by almost none. The discomfort in dealing with "inappropriate" relative stature is visible only in the joking comment and nervous laughter. For example, if we were to look at the problem as an issue of discrimination, most people would rarely admit that they are actively discriminating against an individual because of his short stature. Moreover, even if they are discriminating, they may not be aware of it. In fact, the short male himself, for psychodynamic reasons, may not view himself as being discriminated against. To acknowledge discrimination, he would have to think of himself as having a disability and he may not be prepared

to make this admission. In any event, the issue will rarely be handled in a direct manner.

As a result of this pervasive reluctance of either party to acknowledge the problem, the short male receives mostly inaccurate feedback from the interpersonal environment, making it impossible for him to develop a realistic understanding of the impact of his short stature. He is thus left to construct his own idiosyncratic understanding of his impact on people around him. This may lead to the "paranoid position" of which short males are often accused. For example, one short male (5'3") asked his father why he was so short. His father replied, "Oh, you're not so short." This exchange highlights one of the essential problems. The short male experiences thoughts and feelings that are in response to subtle and overt cues from the environment; however, for the reasons already mentioned, those in the environment negate the legitimacy of these thoughts and feelings. It is, as Keyes (1980) notes, like "fighting a ghost". The "paranoid position" may be a term that is too harsh, but what is meant to be communicated is the acute oversensitivity to personal slight that often develops as the short male attempts to understand what is "wrong" with him that he generates such uncomfortable reactions in others.

The short male is often poised waiting for hints of personal slight. Since he usually will not respond to such suggestions of personal slight directly, the accuracy of the perception of being slighted is rarely verified. What results is interpersonal cautiousness, coupled with the appearance of gregariousness. The short male enjoys being with his fellow men, while understanding, on

some level, that he is not one of them.

Although the experience of difference is not often openly articulated, it has a profound impact on the way the short male feels about himself vis-a-vis his fellow man.

The short male's inexperience in joining with his fellow man and feeling part of a male group is a persistent problem. As long as relationships remain on a "mature", distant, "adult" basis, few problems are experienced. When, however, a certain level of closeness is achieved, the relationship may begin to take on more adolescent qualities, becoming reminiscent of the short male's relationships when he was younger. This is a distinctive feature of the short male's disability: that when he is involved in a close relationship, the regression that occurs places him in the role of a child or adolescent, making him vulnerable to becoming the powerless person in the relationship. The short male does try to convince himself that "that was then and this is now", but there are casual references to his height that serve as powerful reminders. People who are treating him familiarly will frequently refer to his height as his distinguishing characteristic, often doing so in a joking manner so that direct confrontation becomes inappropriate.

A likely result of this concomitant of closeness is that the short male will keep a habitual emotional distance between himself and others. That is, he will interact with others through humor and good social skills, while also using these skills as a means of warding off true intimacy. Hence, there will remain a highly sensitive core of insecurity, hidden rage, and loneliness based on a deeply-experienced

knowledge of being different. The possibility of disconfirming experiences of healthy intimacy and acceptance is reduced further by his use of distance as a defense. Over time, the short male will develop a personality that is seen by others as personable but somewhat self-contained.

Since the short male does want to be a part of the larger males' peer group, he appears to be willing to accept his role as either mascot or intellectual leader.

None of the interview subjects admitted seeking support from other short males. In fact, the distinct impression was that short males tend to avoid contact with one another. This seems to be an avoidance of the possibility that others would think they were grouping themselves based on height, which would be a social acknowledgement by them of their stature difference. Although the potential for increased group power and the development of positive self regard is available, it has not been seized upon. While some other minority groups have powerful support and advocacy groups, the short male acts "as if" the issues are not present. Although lack of cohesiveness is a common problem of low status groups, the short male thereby forfeits his opportunity to identify positively with his own peer group.

Since "short" height is often associated with being childlike and in a subordinate relationship, the major question facing the short male as an adult is how to manage the incongruity between his adult self-image and being treated as a child, in a way that allows for self-respect, good relations with others, and the maintenance of a

sense of competence. The re-emergence of developmental issues is an ongoing problem. Even as an adult, the short male must endure humor about his shortness. These potentially difficult situations are often handled by the short male with humor and diplomacy, but the impact they have on him is to remind him frequently that, no matter how old, established, or successful he becomes, he will always be subject to this form of abuse. For those "joking" with him, it allows them to "put him in his place" -- a place that is socially inferior to theirs; thus the threat of such encounters persists. For these reasons, the short male will be wary of new relationships and increases of closeness in a relationship, as these situations bring with them the potential for the re-emergence of unwanted feelings and troublesome interpersonal issues.

Overall, preliminary results of the interview study suggest that short stature in middle class Caucasian males may lead to the adoption of a distinct and identifiable defensive style. As the result of a sense of body inferiority and vulnerability, there is excessive reliance on rational-analytic skills, to the exclusion of physical and social skills. Paralleling the development of cerebral dominance is the denial of the importance of the body. The underlying anger, at being discriminated against and "made" to feel inferior, often emerges as a sarcastic sense of humor.

The results from the questionnaire in this study, the semantic differential in the female study, and the subjective reports in the interview study all converge, leading to the conclusion that short stature does have a significant impact on males. The way in which a

particular short male copes with this depends on constitutional, social, and family influences.

Attribution of Personality Traits and Personal Qualities

The final prediction, that the sample as a whole would attribute negatively valenced and less socially valued personality traits and personal qualities to men of short height than to men of either average or tall height, was strongly supported. Men of tall and average height were seen as being significantly more mature, uninhibited, positive, secure, masculine, active, complete, successful, optimistic, dominant, capable, confident, and outgoing than men of short height.

The interaction effect was significant, and simple effects tests on the averaged scales revealed that tall subjects attributed significantly less favorable personality attributes to men of short height than to either of the other two groups.

When the data was collapsed and analyzed along the Evaluative, Potency, and Activity factors, analogous results were found. On the Evaluative factor, men of short height were seen less favorably than either of the other two groups. On the Potency factor, significant differences between all three height designations were found, with men of short height being seen as least potent, and men of tall height being seen as most potent. On the Activity factor, significant differences between all three height designations were also found, with men of tall height being seen as most active, and men of short height being seen as least active.

Hence, one might conclude that short subjects see themselves the way others see them, as less potent. The tall subjects see themselves in a privileged position and differentiate themselves from their average height peers.

Essentially, the sample attributes less favorable characteristics to men of short height. The short subjects view themselves this way, revealing something about their self-concept. Similarly, the group attributes positively valenced characteristics to men of tall height and the tall subjects are very positively cathected to their own height. These results are consistent with previous literature presented in this study.

The attitudes toward short males are consistently negatively valenced and these views are, to some extent, internalized by the short male, becoming part of his self-concept.

If one accepts the viewpoint that one's genetically determined attributes interact with social-learning variables in subtle ways (Bandura, 1963), it becomes clear why short stature has important implications for one's personality development. In Western society, tall stature and mesomorphic build in males brings esteem and facilitates the acquisition of rewarding resources. Although this admiration for large size in males may have had survival-related value in primitive, strength-based societies, it is no longer relevant to our society's goals or means of survival. However, over time, these probably instinctive social preferences profoundly influence an individual's social learning history. Boys who are of short stature will most likely be relatively unsuccessful in obtaining positive

reinforcement from their peers. This may lead to a "flight from the body world" (Fisher, 1973), or a movement toward more intellectual pursuits.

The short male's "failure" to attain the cultural ideal for height translates into less social power, lower perceptual impact or "presence", and lower desirability as a heterosexual partner.

Social learning theory would suggest that individuals will behave in a manner consistent with the expectations of others. If, as Staffieri (1967) points out, the expectations are consistent and long lasting, the behavior will be consistent with expectations. Ultimately, one does not end up with a self-fulfilling prophecy but, rather, a social-fulfilling prophecy (McCandless, 1960). As one author expresses it, "when everybody you know treats you shabbily because you are short, you begin to think ill of yourself" (Sokolov, 1978, p.195).

While no research has been conducted on this subject, one potential coping behavior for the stresses of short male stature in adolescence is the choice of homosexuality as a sexual orientation. This allows avoidance of the arenas of heterosexual competition and accommodates the short boy's admiration for height in taller males. Although this choice of lifestyle does not meet with general societal acceptance, it brings membership in a male group that may provide a strong sense of belonging which he could not otherwise experience.

One aspect that emerged in the interview study and that warrants further attention is the potential interaction between a highly supportive environment and successful adaptation and coping. It is

this intervening variable that may well account for the differences in adaptation. As Gillis (1982) pointed out,

An adolescent boy, who is fundamentally secure and has warm accepting parents and generally rewarding social relationships, may not develop strong feelings of inadequacy even if he matures slowly. (p.253)

He goes on to say,

Talking with many well-adjusted short and tall people, I have found that the most common reason they give to explain their successful adaptation is the support they received from their parents. (p.193)

Family environment forms the base for the successful development of self-esteem and interpersonal competence. It is likely that the development of emotional security within the family might serve to inoculate the short boy from difficulties in the larger social arena. If a solid sense of self-worth has been fostered within the family, the assaults to self-esteem might be significantly minimized.

The combination of an unsupportive family environment and a larger social environment insensitive to the needs of the short boy may place this child at greater risk for the development of emotional problems. Research is, as yet, too sparse to test this.

Recent Developments

It was recently reported (New Haven Register, October 14, 1984) that the U.S. Food and Drug Administration is expected to approve soon the use of genetically engineered human growth hormone. Demand for the growth hormone treatment is expected to be overwhelming, even though the treatment is painful and potentially dangerous.

Given this technological advance, it becomes imperative for both medical and mental health professionals to develop a better understanding of the potential issues. Parents who communicate their own anxiety over height may be planting the seeds of emotional difficulties. The issue needs to be sensitively handled, with an appreciation for the possibility that the risks may outweigh the potential gains. Parents may need to be counseled as to the best way to address these issues with their child.

Clinicians who treat children should also be aware of the impact of short stature in males. The bias within the field of mental health is to minimize the importance of the body as a determinant of emotional well-being. Clinicians, when treating the short boy, should inquire sensitively as to the impact of the short stature. Both the parents' and the child's views will yield valuable information about the functioning of the child. An inquiry into the importance and impact of short stature is particularly important if the child is having problems in school and/or emotional difficulties.

At present, no guidelines for the clinical assessment of short stature exist. Nor do guidelines exist for educators or parents. Future research goals should include the development of such assessment guidelines. It is essential to begin making others aware of this important issue, so that the building blocks of self-esteem for the short boy may be more solidly constructed.

The Other Side

It should be noted that to focus only on the disadvantages associated with short stature would be a disservice. If one looks at short stature as a disability with which one must deal, then there may be some developmental benefits to the successful negotiation of this "disability".

It is true, as MacFarland (1964) noted in his study, that:

Many of the most outstandingly mature adults in our entire group, many who are well-integrated, highly competent and/or creative, who are clear about their values, who are outstanding and accepting of self and others, are recruited from those who were confronted with very difficult situations and whose characteristic responses during childhood and adolescence seemed to us to compound their problems.

Being confronted with difficult issues during one's development may serve to build and develop character strengths. The short male may develop greater sensitivity to the plights of others, be more interpersonally sensitive, and develop sharp analytic skills.

In light of society's increasing ability to engineer human genetic material, there is the potential that individual differences may be significantly diminished. In fact, learning to tolerate difference is a mark of a mature society. As the farthest deviations from societal ideals for physical characteristics are eliminated, the range of acceptable normality will, no doubt, contract. Because of these trends, the positive aspects of difference require further study.

Future Avenues for Research

At this time, all of the research, including the present study, used only Caucasian, college males. This is a bias that must be overcome if a deeper understanding of the topic is to be achieved. While middle class males depend more heavily on intellectual abilities and humor, such attributes may not be valued in different socio-economic and non-Caucasian environments. The choice of males in college also biases the study toward cerebral modes of compensation.

The short male who lives in a lower socio-economic environment or is of an ethnic group that places a high value on machismo will very likely develop a different adaptation to his short stature. Within his environment, the cerebral approach might only bring derision and exclusion from his peers. In fact, it might threaten his very survival.

As a result, one might speculate that adaptation would take the form of exaggerated machismo, the purpose of which is to prove to self and others that he is as much a man as anyone else is. In this kind of environment, the short male would have to establish his place quickly within his peer group, so as to avoid frequent challenges because of his short stature. This remains speculative, however, as no research on the topic of short stature in males has addressed the possible socio-economic or ethnic differences.

Another potentially interesting area for research would be a study in which the experience of older short males might be systematically examined. One might hypothesize that the impact of short stature would reach a peak in late adolescence and decrease in

importance as one matures. Once a spouse has been found, professional success assured, and the issue of self-esteem broadened, one might reasonably expect that the salience of the height issue would dissipate.

On the other hand, this may depend on intervening variables, such as the support of the family of origin, one's intellectual gifts, and the socio-economic environment.

The issues are complex, with no clear-cut answers. The results of this study indicate that both additional research and a greater sensitivity to the issues are needed.

APPENDIX A

MALES 5 ft. 5½ inches or under
NEEDED to fill out questionnaire
for dissertation study

Time Commitment: 30 minutes

Compensation: \$8.00

When: Monday, Jan. 30
at 6:30 p.m.

Where: Meet inside Fairfield Rd.
entrance of main library

APPENDIX B

TO THE PARTICIPANTS:

This is a study of self-concept and in order for the results of this investigation to be meaningful, your honesty, frankness, and sincere cooperation are required. It is important to add that there are no right or wrong answers to any of the questions asked within this packet. The measures used here are designed to differentiate individuals, not to rank them as good or bad, right or wrong.

Please do not put your name or any identifying information on these materials. Your responses will be treated as confidential and all data collected will remain anonymous. Your cooperation and participation in this project is greatly appreciated.

PLEASE WAIT FOR INSTRUCTIONS BEFORE YOU BEGIN

APPENDIX C

I.D. Code #: _____

AGE: (circle) 17 18 19 20 21 22+

SEX: Male _____ 1
Female _____ 2

Height: (exact measurement in barefeet)

_____ ft. inches _____

Weight: _____ pounds

Number of Siblings _____

I am the: Oldest _____ 1
youngest _____ 2
Middle _____ 3

Family Income (based on parents)

Under \$10,000 _____ 1
\$10,000(+)-20,000 _____ 2
\$20,000(+)-30,000 _____ 3
\$30,000(+) _____ 4

Marital Status:

Single _____ 1
Married _____ 2
Cohabit _____ 3
Separated _____ 4
Divorced _____ 5

Cumulative Grade Point Average

Under 2.0 _____ 3.0 - 3.5 _____
2.0 - 2.5 _____ 3.6 - 4.0 _____
2.6 - 2.9 _____

Religion:

Catholic _____ 1
Protestant _____ 2
Jewish _____ 3
Other _____ 4

Declared Major:

Race:

Caucasion _____ 1
Black _____ 2
Oriental _____ 3
Hispanic _____ 4
Other _____ 5YEAR IN SCHOOL: Fresh _____
Soph _____
Jr. _____
Sr. _____
Grad. _____
Other _____

Do you have any significant Medical Problems?

Yes _____ 1
No _____ 2

Do you have any significant Physical Abnormalities?

Yes _____ 1
No _____ 2

If yes, what are they? _____

Do you regularly participate in sports?

(minimum of approximately one time per week)

Yes _____ 1
No _____ 2

APPENDIX D

INSTRUCTIONS FOR THIS PAGE:

On this page, a number of things characteristic of yourself are listed. You are asked to indicate which things you feel positively about, which things you have no feeling about one way or the other, and which things you have negative feelings about.

USING THE SCALE BELOW, CIRCLE THE NUMBER FOR EACH ITEM WHICH BEST REPRESENTS YOUR FEELINGS.

- 1- I have strong positive feelings
- 2- I have moderately positive feelings
- 3- I have no feelings one way or the other
- 4- I have moderately negative feelings
- 5- I have strong negative feelings

HAIR-----1 2 3 4 5

FACIAL COMPLEXION-----1 2 3 4 5

APPETITE-----1 2 3 4 5

HANDS-----1 2 3 4 5

NOSE-----1 2 3 4 5

FINGERS-----1 2 3 4 5

WRISTS-----1 2 3 4 5

WAIST-----1 2 3 4 5

ENERGY LEVEL-----1 2 3 4 5

BACK-----1 2 3 4 5

EARS-----1 2 3 4 5

CHIN-----1 2 3 4 5

EXCERCISE-----1 2 3 4 5

ANKLES-----1 2 3 4 5

NECK-----1 2 3 4 5

SHAPE OF HEAD-----1 2 3 4 5

BODY BUILD-----1 2 3 4 5

PROFILE-----1 2 3 4 5

HEIGHT-----1 2 3 4 5

TRUNK-----1 2 3 4 5

WIDTH OF SHOULDERS-----1 2 3 4 5

ARMS-----1 2 3 4 5

CHEST-----1 2 3 4 5

EYES-----1 2 3 4 5

DIGESTION-----1 2 3 4 5

HIPS-----1 2 3 4 5

SKIN TEXTURE-----1 2 3 4 5

LIPS-----1 2 3 4 5

LEGS-----1 2 3 4 5

TEETH-----1 2 3 4 5

FOREHEAD-----1 2 3 4 5

FEET-----1 2 3 4 5

VOICE-----1 2 3 4 5

HEALTH-----1 2 3 4 5

SEX ACTIVITIES-----1 2 3 4 5

KNEES-----1 2 3 4 5

POSTURE-----1 2 3 4 5

FACE-----1 2 3 4 5

WEIGHT-----1 2 3 4 5

SEX ORGANS-----1 2 3 4 5

HAIR DISTRIBUTION-----1 2 3 4 5

APPENDIX E

- 1 PLACE AN (X) BEFORE EVERY WORD THAT HAS EVER BEEN USED BY ANYONE IN DESCRIBING YOU. DRAW A LINE THROUGH ANY WORD YOU DO NOT UNDERSTAND. BE HONEST WITH YOURSELF - REMEMBER NO ONE IS PERFECT.

PEOPLE SAY I AM

- | | | |
|---------------------------|------------------------|--------------------------|
| 1 DECENT | 30 DOWN-TO-EARTH | 59 INTELLIGENT |
| 2 RESOLUTE | 31 HONORABLE | 60 OBJECTIVE |
| 3 ORDINARY | 32 AMUSING | 61 POPULAR |
| 4 STRONG-MINDED | 33 LEISURELY | 62 RESERVED |
| 5 ETHICAL | 34 TRANQUIL | 63 HARDY |
| 6 VULNERABLE | 35 TENSE | 64 HESITANT |
| 7 RESPECTABLE | 36 ATTRACTIVE | 65 MELLOW |
| 8 STURDY | 37 APPREHENSIVE | 66 DISCRIMINATING |
| 9 APOLOGETIC | 38 WELL-MANNERED | 67 ABSENT-MINDED |
| 10 RATIONAL | 39 DELIBERATE | 68 MERRY |
| 11 RESPECTFUL | 40 LUCKY | 69 PRAGMATIC |
| 12 STYLISH | 41 OLD-FASHIONED | 70 SELF-SATISFIED |
| 13 WARY | 42 PROFICIENT | 71 COURTEOUS |
| 14 DEMANDING | 43 ANALYTICAL | 72 FIRM |
| 15 SCHEMING | 44 CALM | 73 PASSIONATE |
| 16 SELF-DISCIPLINED | 45 FRANK | 74 NERVOUS |
| 17 TIDY | 46 DEFENSIVE | 75 COOPERATIVE |
| 18 FUNNY | 47 ROMANTIC | 76 HYPERSENSITIVE |
| 19 PROFOUND | 48 BRAVE | 77 LOVABLE |
| 20 MATTER-OF-FACT | 49 CONSIDERATE | 78 PRINCIPLED |
| 21 GRACEFUL | 50 SERENE | 79 AFFECTIONATE |
| 22 PATIENT | 51 IMPETUOUS | 80 INOFFENSIVE |
| 23 PUNCTILIOUS | 52 CHARMING | 81 MERCIFUL |
| 24 SOCIABLE | 53 FAIR-MINDED | 82 DEFINITE |
| 25 JUST | 54 JOVIAL | 83 PERFECTIONISTIC |
| 26 GENTLE | 55 SCRUPULOUS | 84 TOUGH |
| 27 SELF-CONSCIOUS | 56 SOFT-SPOKEN | 85 SELF-RELIANT |
| 28 SKEPTICAL | 57 DISTINGUISHED | 86 LIKABLE |
| 29 MATURE | 58 WORRIED | 87 POSSESSIVE |

- 2 NOW, PLACE AN (X) BEFORE EVERY WORD WHICH YOU HONESTLY BELIEVE IS DESCRIPTIVE OF YOU: DRAW A LINE THROUGH ANY WORD YOU DO NOT UNDERSTAND.

I REALLY AM

- | | | |
|---------------------------|------------------------|--------------------------|
| 1 DECENT | 30 DOWN-TO-EARTH | 59 INTELLIGENT |
| 2 RESOLUTE | 31 HONORABLE | 60 OBJECTIVE |
| 3 ORDINARY | 32 AMUSING | 61 POPULAR |
| 4 STRONG-MINDED | 33 LEISURELY | 62 RESERVED |
| 5 ETHICAL | 34 TRANQUIL | 63 HARDY |
| 6 VULNERABLE | 35 TENSE | 64 HESITANT |
| 7 RESPECTABLE | 36 ATTRACTIVE | 65 MELLOW |
| 8 STURDY | 37 APPREHENSIVE | 66 DISCRIMINATING |
| 9 APOLOGETIC | 38 WELL-MANNERED | 67 ABSENT-MINDED |
| 10 RATIONAL | 39 DELIBERATE | 68 MERRY |
| 11 RESPECTFUL | 40 LUCKY | 69 PRAGMATIC |
| 12 STYLISH | 41 OLD-FASHIONED | 70 SELF-SATISFIED |
| 13 WARY | 42 PROFICIENT | 71 COURTEOUS |
| 14 DEMANDING | 43 ANALYTICAL | 72 FIRM |
| 15 SCHEMING | 44 CALM | 73 PASSIONATE |
| 16 SELF-DISCIPLINED | 45 FRANK | 74 NERVOUS |
| 17 TIDY | 46 DEFENSIVE | 75 COOPERATIVE |
| 18 FUNNY | 47 ROMANTIC | 76 HYPERSENSITIVE |
| 19 PROFOUND | 48 BRAVE | 77 LOVABLE |
| 20 MATTER-OF-FACT | 49 CONSIDERATE | 78 PRINCIPLED |
| 21 GRACEFUL | 50 SERENE | 79 AFFECTIONATE |
| 22 PATIENT | 51 IMPETUOUS | 80 INOFFENSIVE |
| 23 PUNCTILIOUS | 52 CHARMING | 81 MERCIFUL |
| 24 SOCIABLE | 53 FAIR-MINDED | 82 DEFINITE |
| 25 JUST | 54 JOVIAL | 83 PERFECTIONISTIC |
| 26 GENTLE | 55 SCRUPULOUS | 84 TOUGH |
| 27 SELF-CONSCIOUS | 56 SOFT-SPOKEN | 85 SELF-RELIANT |
| 28 SKEPTICAL | 57 DISTINGUISHED | 86 LIKABLE |
| 29 MATURE | 58 WORRIED | 87 POSSESSIVE |

- 3 NOW, PLACE AN (X) BEFORE THOSE WORDS WHICH YOU BELIEVE DESCRIBES THE IDEAL PERSON. DRAW A LINE THROUGH ANY WORD YOU DO NOT UNDERSTAND.

THE IDEAL PERSON IS

- | | | |
|---------------------------|------------------------|--------------------------|
| 1 DECENT | 30 DOWN-TO-EARTH | 59 INTELLIGENT |
| 2 RESOLUTE | 31 HONORABLE | 60 OBJECTIVE |
| 3 ORDINARY | 32 AMUSING | 61 POPULAR |
| 4 STRONG-MINDED | 33 LEISURELY | 62 RESERVED |
| 5 ETHICAL | 34 TRANQUIL | 63 HARDY |
| 6 VULNERABLE | 35 TENSE | 64 HESITANT |
| 7 RESPECTABLE | 36 ATTRACTIVE | 65 MELLOW |
| 8 STURDY | 37 APPREHENSIVE | 66 DISCRIMINATING |
| 9 APOLOGETIC | 38 WELL-MANNERED | 67 ABSENT-MINDED |
| 10 RATIONAL | 39 DELIBERATE | 68 MERRY |
| 11 RESPECTFUL | 40 LUCKY | 69 PRAGMATIC |
| 12 STYLISH | 41 OLD-FASHIONED | 70 SELF-SATISFIED |
| 13 WARY | 42 PROFICIENT | 71 COURTEOUS |
| 14 DEMANDING | 43 ANALYTICAL | 72 FIRM |
| 15 SCHEMING | 44 CALM | 73 PASSIONATE |
| 16 SELF-DISCIPLINED | 45 FRANK | 74 NERVOUS |
| 17 TIDY | 46 DEFENSIVE | 75 COOPERATIVE |
| 18 FUNNY | 47 ROMANTIC | 76 HYPERSENSITIVE |
| 19 PROFOUND | 48 BRAVE | 77 LOVABLE |
| 20 MATTER-OF-FACT | 49 CONSIDERATE | 78 PRINCIPLED |
| 21 GRACEFUL | 50 SERENE | 79 AFFECTIONATE |
| 22 PATIENT | 51 IMPETUOUS | 80 INOFFENSIVE |
| 23 PUNCTILIOUS | 52 CHARMING | 81 MERCIFUL |
| 24 SOCIABLE | 53 FAIR-MINDED | 82 DEFINITE |
| 25 JUST | 54 JOVIAL | 83 PERFECTIONISTIC |
| 26 GENTLE | 55 SCRUPULOUS | 84 TOUGH |
| 27 SELF-CONSCIOUS | 56 SOFT-SPOKEN | 85 SELF-RELIANT |
| 28 SKEPTICAL | 57 DISTINGUISHED | 86 LIKABLE |
| 29 MATURE | 58 WORRIED | 87 POSSESSIVE |

APPENDIX F

INSTRUCTIONS:

On this page you will find a concept to be judged and beneath it is a set of 17 paired-items. Circle the number on each of the 17 paired-items that best reflects your feeling about the concept listed at the top of the page. Be sure to circle only one number on each set of paired-items.

MEN OF AVERAGE HEIGHT

MATURE	1	2	3	4	5	6	7	IMMATURE	—
INHIBITED	1	2	3	4	5	6	7	UNINHIBITED	—
BAD	1	2	3	4	5	6	7	GOOD	—
POSITIVE	1	2	3	4	5	6	7	NEGATIVE	—
SECURE	1	2	3	4	5	6	7	INSECURE	—
CONFORMING	1	2	3	4	5	6	7	INDIVIDUALISTIC	—
FEMININE	1	2	3	4	5	6	7	MASCULINE	—
ACTIVE	1	2	3	4	5	6	7	PASSIVE	—
INCOMPLETE	1	2	3	4	5	6	7	COMPLETE	—
SUCCESSFUL	1	2	3	4	5	6	7	UNSUCCESSFUL	—
OPTIMISTIC	1	2	3	4	5	6	7	PESSIMISTIC	—
DIRTY	1	2	3	4	5	6	7	CLEAN	—
DOMINANT	1	2	3	4	5	6	7	SUBMISSIVE	—
OUTGOING	1	2	3	4	5	6	7	WITHDRAWN	—
AGGRESSIVE	1	2	3	4	5	6	7	TIMID	—
NOT CAPABLE	1	2	3	4	5	6	7	CAPABLE	—
CONFIDENT	1	2	3	4	5	6	7	NOT CONFIDENT	—

INSTRUCTIONS:

On this page you will find a concept to be judged and beneath it is a set of 17 paired-items. Circle the number on each of the 17 paired-items that best reflects your feeling about the concept listed at the top of the page. Be sure to circle only one number on each set of paired-items.

MEN OF SHORT HEIGHT

MATURE	1	2	3	4	5	6	7	IMMATURE	—
INHIBITED	1	2	3	4	5	6	7	UNINHIBITED	—
BAD	1	2	3	4	5	6	7	GOOD	—
POSITIVE	1	2	3	4	5	6	7	NEGATIVE	—
SECURE	1	2	3	4	5	6	7	INSECURE	—
CONFORMING	1	2	3	4	5	6	7	INDIVIDUALISTIC	—
FEMININE	1	2	3	4	5	6	7	MASCULINE	—
ACTIVE	1	2	3	4	5	6	7	PASSIVE	—
INCOMPLETE	1	2	3	4	5	6	7	COMPLETE	—
SUCCESSFUL	1	2	3	4	5	6	7	UNSUCCESSFUL	—
OPTIMISTIC	1	2	3	4	5	6	7	PESSIMISTIC	—
DIRTY	1	2	3	4	5	6	7	CLEAN	—
DOMINANT	1	2	3	4	5	6	7	SUBMISSIVE	—
OUTGOING	1	2	3	4	5	6	7	WITHDRAWN	—
AGGRESSIVE	1	2	3	4	5	6	7	TIMID	—
NOT CAPABLE	1	2	3	4	5	6	7	CAPABLE	—
CONFIDENT	1	2	3	4	5	6	7	NOT CONFIDENT	—

INSTRUCTIONS:

On this page you will find a concept to be judged and beneath it is a set of 17 paired-items. circle the number on each of the 17 paired-items that best reflects your feeling about the concept listed at the top of the page. Be sure to circle only one number on each set of paired-items.

MEN OF TALL HEIGHT

MATURE	1	2	3	4	5	6	7	IMMATURE	—
INHIBITED	1	2	3	4	5	6	7	UNINHIBITED	—
BAD	1	2	3	4	5	6	7	GOOD	—
POSITIVE	1	2	3	4	5	6	7	NEGATIVE	—
SECURE	1	2	3	4	5	6	7	INSECURE	—
CONFORMING	1	2	3	4	5	6	7	INDIVIDUALISTIC	—
FEMININE	1	2	3	4	5	6	7	MASCULINE	—
ACTIVE	1	2	3	4	5	6	7	PASSIVE	—
INCOMPLETE	1	2	3	4	5	6	7	COMPLETE	—
SUCCESSFUL	1	2	3	4	5	6	7	UNSUCCESSFUL	—
OPTIMISTIC	1	2	3	4	5	6	7	PESSIMISTIC	—
DIRTY	1	2	3	4	5	6	7	CLEAN	—
DOMINANT	1	2	3	4	5	6	7	SUBMISSIVE	—
OUTGOING	1	2	3	4	5	6	7	WITHDRAWN	—
AGGRESSIVE	1	2	3	4	5	6	7	TIMID	—
NOT CAPABLE	1	2	3	4	5	6	7	CAPABLE	—
CONFIDENT	1	2	3	4	5	6	7	NOT CONFIDENT	—

APPENDIX G

GENERAL INSTRUCTIONS

TOTAL: _____

Read carefully

If at all possible answer all questions, being sure to choose only one answer, "Yes," "No," "?" (undecided). Write an X under the answer that is nearest true for you. Your answers and any comments you may wish to add will, of course, be considered strictly confidential.

	Answers		
	YES	NO	?
1. Do you ordinarily like to be with people rather than alone? _____			
2. Do you have social ease? _____			
3. Do you lack self-confidence? _____			
4. Do you feel that you get enough praise? _____			
5. Do you often have a feeling of resentment against the world? _____			
6. Do you think people like you as much as they do others? _____			
7. Do you worry too long over humiliating experiences? _____			
8. Can you be comfortable with yourself? _____			
9. Are you generally an unselfish person? _____			
10. Do you tend to avoid unpleasantness by running away? _____			
11. Do you often have a feeling of loneliness even when you are with people? _____			
12. Do you feel that you are getting a square deal in life? _____			
13. When your friends criticize you, do you usually take it well? _____			
14. Do you get discouraged easily? _____			
15. Do you usually feel friendly toward most people? _____			
16. Do you often feel that life is not worth living? _____			
17. Are you generally optimistic? _____			
18. Do you consider yourself a rather nervous person? _____			
19. Are you in general a happy person? _____			
20. Are you ordinarily quite sure of yourself? _____			
21. Are you often self-conscious? _____			
22. Do you tend to be dissatisfied with yourself? _____			
23. Are you frequently in low spirits? _____			
24. When you meet people for the first time do you usually feel they will not like you? _____			

	Answers		
	YES	NO	?
25. Do you have enough faith in yourself?			
26. Do you feel in general most people can be trusted?			
27. Do you feel that you are useful in the world?			
28. Do you ordinarily get on well with others?			
29. Do you spend much time worrying about the future?			
30. Do you usually feel well and strong?			
31. Are you a good conversationalist?			
32. Do you have the feeling of being a burden to others?			
33. Do you have difficulty in expressing your feelings?			
34. Do you usually rejoice in the happiness or good fortune of others?			
35. Do you often feel left out of things?			
36. Do you tend to be a suspicious person?			
37. Do you ordinarily think of the world as a nice place to live in?			
38. Do you get upset easily?			
39. Do you think of yourself often?			
40. Do you feel that you are living as you please rather than as someone else pleases?			
41. Do you feel sorrow and pity for yourself when things go wrong?			
42. Do you feel that you are a success at your work or your job?			
43. Do you ordinarily let people see what you are really like?			
44. Do you feel that you are not satisfactorily adjusted to life?			
45. Do you ordinarily proceed on the assumption that things usually tend to turn out all right?			
46. Do you feel that life is a great burden?			
47. Are you troubled with feelings of inferiority?			
48. Do you generally feel "good"?			
49. Do you get along well with the opposite sex?			
50. Are you ever troubled with an idea that people are watching you on the street?			
51. Are you easily hurt?			
52. Do you feel at home in the world?			
53. Do you worry about your intelligence?			
54. Do you generally put others at their ease?			
55. Do you have a vague fear of the future?			
56. Do you behave naturally?			
57. Do you feel you are generally lucky?			
58. Did you have a happy childhood?			

	Answers		
	YES	NO	?
59. Do you have many real friends?			
60. Do you feel restless most of the time?			
61. Do you tend to be afraid of competition?			
62. Is your home environment happy?			
63. Do you worry too much about possible misfortune?			
64. Do you often become very annoyed with people?			
65. Do you ordinarily feel contented?			
66. Do your moods tend to alternate from very happy to very sad?			
67. Do you feel that you are respected by people in general?			
68. Are you able to work harmoniously with others?			
69. Do you feel you can't control your feelings?			
70. Do you sometimes feel that people laugh at you?			
71. Are you generally a relaxed person (rather than tense)?			
72. On the whole do you think you are treated right by the world?			
73. Are you ever bothered by a feeling that things are not real?			
74. Have you often been humiliated?			
75. Do you think you are often regarded as queer?			

APPENDIX H

Using the Scale below, answer the following questions.

- 1-never
- 2-rarely
- 3-sometimes
- 4-often
- 5-always

- 1) Do you feel that your height has been a help to you socially? 1 2 3 4 5
- 2) Do you feel that your height has been a hinderance to you socially? 1 2 3 4 5
- 3) Do you ever add inches when reporting your height? 1 2 3 4 5
- 4) If you could choose any height to be, what would it be? _____ Ft. _____ IN.

The List below contains a number of social situations in which height comparisons might be made. Using the scale below, indicate to what extent you feel comfortable in each of the situations.

- 1-very uncomfortable
- 2-somewhat uncomfortable
- 3-neither comfortable or uncomfortable
- 4-comfortable
- 5-very comfortable

- (5) Standing in a crowded line ----- 1 2 3 4 5
- (6) Giving an important presentation in front of a group ----- 1 2 3 4 5
- (7) On a first date ----- 1 2 3 4 5
- (8) Involved in a contact sport ----- 1 2 3 4 5
- (9) At a crowded party----- 1 2 3 4 5
- 10) Standing at a club or bar----- 1 2 3 4 5
- 11) At an initial business or professional meeting----- 1 2 3 4 5

Using the scale below, please answer the following questions.

- 1-not important
- 2-slightly important
- 3-moderately important
- 4-very important
- 5-extremely important

- (12) How important do you think a man's height is in acquiring a dating partner? 1 2 3 4 5
- (13) How important do you think a man's height is in acquiring a marriage partner? 1 2 3 4 5
- (14) How important do you think a man's height is in terms of being professionally successful in life? 1 2 3 4 5

Using the scale below, please answer the following questions.

- 1-much more than average
- 2-somewhat more than average
- 3-average
- 4-somewhat less than average
- 5-much less than average

- (15) Comparing your physical attractiveness with that of others of your sex and age, how attractive do you think you are? 1 2 3 4 5
- (16) Comparing your overall desirability as a dating partner with others of your sex and age, how desirable do you think you are? 1 2 3 4 5
- (17) Comparing your overall desirability as a marriage partner with others of your sex and age, how desirable do you think you are? 1 2 3 4 5

APPENDIX I

ANOVA for Individual Items: Semantic Differential

ITEM	Source	SS	df	MS	F	P
#1	Rated Ht.	26.18	2	13.09	8.55	4.001
	Error	361.41	236	1.53		
#2	Rated Ht.	93.13	2	46.56	22.47	4.01
	Error	415.18	236	1.76		
#3	Rated Ht.	4.26	2	2.13	2.28	N.S.
	Error	220.04	236	0.932		
#4	Rated Ht.	101.14	2	50.56	34.79	4.01
	Error	345.93	238	1.45		
#5	Rated Ht.	351.746	2	175.87	117.24	4.01
	Error	354.029	236	1.50		
#6	Rated Ht.	31.94	2	15.97	7.49	4.001
	Error	507.503	238	2.13		
#7	Rated Ht.	39.99	2	19.99	21.78	4.01
	Error	218.555	238	0.918		
#8	Rated Ht.	53.31	2	26.65	16.83	4.01
	Error	373.77	236	1.58		
#9	Rated Ht.	82.48	2	41.24	35.37	4.01
	Error	277.522	238	1.16		

Table (Continued)

ITEM	Source	SS	df	MS	F	P
#10	Rated Ht.	46.17	2	23.08	19.72	<.01
	Error	278.66	238	1.17		
#11	Rated Ht.	102.59	2	51.29	40.65	<.01
	Error	297.80	236	1.26		
#12	Rated Ht.	14.73	2	7.36	7.10	<.001
	Error	247.11	238	1.03		
#13	Rated Ht.	305.20	2	152.60	99.84	<.01
	Error	360.70	236	1.528		
#14	Rated Ht.	113.25	2	56.62	37.29	<.01
	Error	361.407	238	1.51		
#15	Rated Ht.	133.65	2	66.82	41.18	<.01
	Error	383.004	236	1.62		
#16	Rated Ht.	22.47	2	11.23	12.26	<.001
	Error	218.17	238	0.916		
#17	Rated Ht.	219.195	2	109.59	70.21	<.01
	Error	371.51	238	1.56		

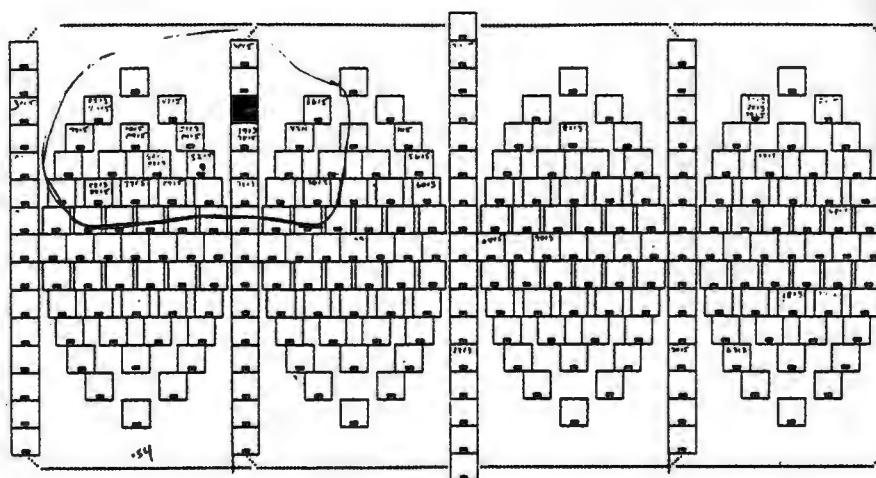
APPENDIX J

AVA PATTERN SHAPES FOR SHORT SUBJECTS

AVA UNIVERSE TABULATION FORM

Study of: _____
 Country: _____ Sample: _____ N: _____ Date: _____

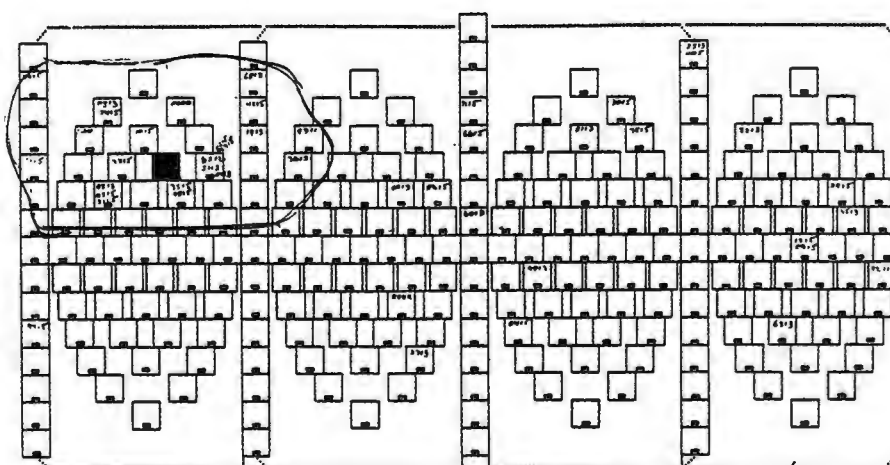
BASIC
SELF



AVA UNIVERSE TABULATION FORM

Study of: _____
 Country: _____ Sample: _____ N: _____ Date: _____

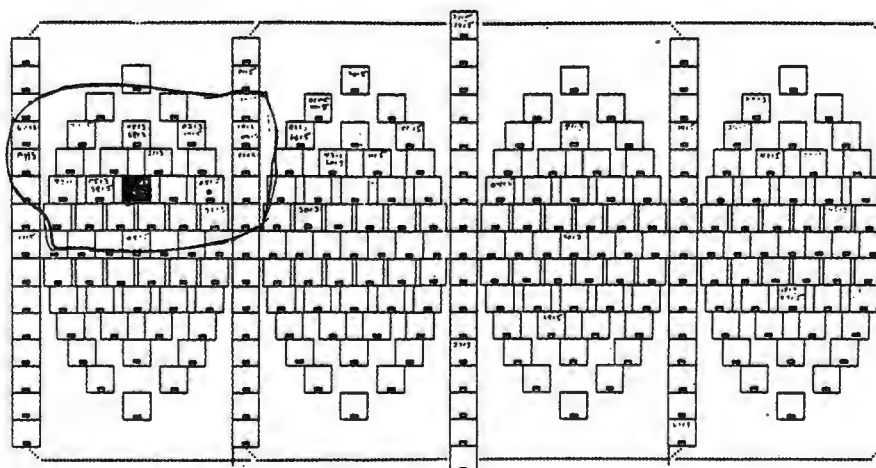
SOCIAL
SELF



AVA UNIVERSE TABULATION FORM

Study of: _____
 Country: _____ Sample: _____ N: _____ Date: _____

IMAGE



APPENDIX K

APPENDIX

WOMEN'S ATTRIBUTION OF PERSONALITY CHARACTERISTICS
TO MEN OF SHORT, AVERAGE, AND TALL HEIGHTS

L. F. MARTEL

UNIVERSITY OF RHODE ISLAND

1984

Summary

170 female college students were administered three semantic differential measures aimed at assessing their opinions about men of different height. Results strongly indicated that a) women attribute positively valenced characteristics to men of tall and average height and b) attribute negatively valued and much less socially valued characteristics to men of short height. The psychosocial implications of this finding for the short male are discussed.

INTRODUCTION

No adult is more painfully aware of who's bigger than a smaller man competing with a large one for the attention of a woman.

Keyes, R.
The Height of Your Life,
 1980, p. 147.

Historically, there has been considerable lay and professional interest in the relationship between one's personality and one's appearance. Strong opinions exist regarding such relationships among height, behaviour, and personality. Such researchers as Kretschmer (1936) and Sheldon (1940) have explored the relationship among body-type, temperament, and personality. Barker (1946) was a researcher who restated the problem as a "somato-psychological" one. Like Kretschmer and Sheldon, he believed that an individual's physical attributes such as size, shape, appearance and strength determine, to a great extent, the kind of person one becomes.

If such a relationship does indeed exist, it has been hypothesized that the relationship may, in large part, be due to the phenomenon of stereotyping (Staffieri, 1967; Lerner, 1969; Lerner & Korn, 1972). There is research evidence to support this assertion (Wallace, 1964; Dion, Berscheid & Walston, 1972; Yates and Taylor, 1978; Gacsaly, 1979). It was found by Staffieri (1967) for example, that children as young as six years old had absorbed the stereotyped body type-personality relationships.

Others such as Lerner and Korn (1972) have demonstrated that all age groups show a preference for the mesomorphic body build. Still other research (Berscheid, et al., 1973; Berscheid & Walster, 1974; Elman, 1977) has shown that more attractive individuals have more socially desirable personality traits attributed to them. In a search of the literature, only one study attended to the interaction effect of height (X) body build. Gascaly (1979) concluded that the added dimension of height significantly altered the subjects' behaviour expectancies of the stimulus figures in the expected directions.

Thirty years ago, Barker (1953) lamented that no studies examining the relationship between height and personality could be found in the literature. This situation has not changed much as several recent authors have noted (Gunderson, 1965; Feldman, 1975; Prieto, 1975; Graziano, 1978; Adams, 1980; Keyes, 1980).

One author (Keyes, 1980) makes the provocative observation that the paucity of research on the topic is due to the fact that:

the whole problem makes everybody nervous all around, with the short people themselves wishing the issue would just go

away, normal sized people often wishing short people would just go away (p. 92).

The results of the research on this topic are overwhelmingly consistent. The short male is viewed as being less attractive and a less desirable dating partner (Graziano, 1978). He is also seen as a less desirable marriage partner (Beigel, 1954). The short male is often described by others in pejorative terms (Gillis, 1982) and he is sometimes thought of as being "handicapped" (Dwyer, 1968). One author (Beigel, 1954) has even written that "shorter males, as a rule, do not strike the female as really true men." This social reality in conjunction with a strictly adhered to male-taller dating/marriage norm (Beigel, 1954; Walster, 1966; Berscheid, 1972; Graziano, 1978; Keyes, 1980; Gillis, 1980, 1982) makes for possible developmental and life-long difficulties.

The short male is discriminated against in virtually all important life spheres including both social and economic ones (Kurtz, 1969; Christian Science Monitor, 1977; Feldman, 1975; U.S. News & World Report, 1977; Graziano, 1978; Keyes, 1980), and it is further hypothesized that females do distinctly discriminate against shorter males and that this can be demonstrated by the measurement of their attitude toward men of different height.

METHOD

Subjects Subjects consisted of 170 female college students enrolled in introductory psychology courses at a large New England University. The mean age of the subjects was 18.4 (S.D. = 1.05 years). The mean grade point average was 3.3 (S.D. = 1.0) on a 4.0 scale.

Over 90% of the subjects were freshmen and sophmores with 10% being in their Junior and Senior year of college. Almost 98% of the subjects were single 95% were Caucasian. The small representation of subjects other than Caucasian recluded any analyses including race differences.

Procedure

Subjects were administered the measures in groups within their classrooms. Each Subject was given a packet containing a cover sheet explaining the purpose of the study, a demographic questionnaire (e.g. age, height, weight, marital status, etc.), and the three semantic differential measures. This packet may be seen in Appendix 1.

Measure

Subjects responded to 3 Semantic Differential measures designed after the original format as outlined by Osgood, Suci, and Tannenbaum (1957). The adjectives used in the construction of the semantic differential used in this study were culled from several sources (Osgood, Suci, and Tannenbaum, 1957; Coyne and Holzman, 1966; Harigopal, 1979; Albaum et al., 1981).

The use of the 7-point scale was chosen as it has been found that with seven alternatives, all of them tend to be used with roughly equal frequencies (Osgood, Succi, and Tannenbaum, 1957). Each of three semantic differential measures consisted of 17 paired adjectives to be rated on a 7 point Likert scale. Positively and negatively valenced adjectives were randomly placed on either end of the 7 point continuum to eliminate the possibility of patterned subject response. The concepts for the three scales were "men of average height," "men of short height" and "men of tall height". The subjects were asked to circle the number on each of the seventeen paired items that best reflected their feelings about the concept listed at the top of each of the three pages.

To assure that the measures were stable over time, a test-retest reliability study of the semantic-differentials was conducted. Using 82 male and female subjects, the measures were administered and readministered with a two week interval. The results of the test-retest reliability of the measures were computed yielding a test-retest reliability coefficient for scale 1 (Men of Average Height) of .64 (N=82), for Scale 2 (Men of Short Height) .81 (N=81), and for Scale 3 (Men of Tall Height) .72 (N=81).

For the purposes of the assessment of the internal consistency of the three measures ((1) men of short height, (2) men of average height, (3) men of tall height) a coefficient alpha (Chronbach, 1951) for each of these three measures was computed. As seen in Table 65, the results of these analyses reveal a rather high level of internal •

consistency, with all three scales yielding alpha coefficients in the mid-eighties (Measure 1 = .85, Measure 2 = .81, Measure 3 = .87).

RESULTS

An item by item analysis of variance among the three semantic differentials was performed utilizing the BMDP2V computer program. The ANOVA's revealed highly significant differences ($p < .01$) across 15 of the 17 items. The ANOVA results may be found in Table 61. Significant ANOVA's were followed by the Tukey (HSD) Multiple range test. These results may be found in Table 62.

The pattern of results across items on the three measures is graphically in Figure 13. As the pattern of individual items clearly indicates, the female subjects had remarkably distinct and unequivocal opinions about the characteristics associated with men of different height. The "Men of Short Height" were consistently seen in pejorative or negatively valenced terms while the "Men of Average Height" and "Men of Tall Height" were seen in consistently positive terms. As may be seen in Figure 13 the vast majority of responses yield no significant difference between "Men of Tall height" and "Men of Average Height".

In fact, the pattern for "Men of Short Height" and "Men of Tall Height" consistently covary. The "Men of Short Height", on the other hand, are seen significantly more pejorative terms than their taller counterparts.

Table 63, which contains the means and standard deviations for the items reveals that female subjects find "Men of Short Height" to be more immature, inhibited, negative, insecure, conforming, feminine, passive, incomplete, less successful, pessimistic, withdrawn, and less capable than either of their average height or taller counterparts.

On three of the items, there were significant differences between all three height categories, with "Men of Tall Height" being seen as most dominant, aggressive, and confident, "Men of Average Height" significantly less so, and "Men of Short Height" being the least so. On none of the 17 items were "Men of Short Height" rated more favorably than either of the other two categories.

The data was also collapsed along the Evaluation, Potency, and Activity factors as have been outlined in Osgood, Suci's, and Tannenbaum's (1957) original work. Evaluation, is interpreted as "goodness," Potency is interpreted as "Strength", and Activity interpreted as expressing motion or action.

The results of the ANOVA and Tukey (HSD) follow-up Tests for the three factor scores reveals significant differences that are analogous to the results of the item-by-item ANOVA. The results, as seen in Tables 64 and 65 for the Evaluation factor, reveal that the "Men of Short Height" are evaluated in a significantly less favorable light than are either of the other two groups ($p < .01$).

In terms of the Potency factor, all pairwise differences are significant ($p < .05$) with "Men of Tall Height" being seen as most potent,

"Men of Average Height" being seen as significantly less potent, and "Men of Short Height" being seen as least potent. These results may be seen in Tables 66 and 67 .

Regarding the Activity factor, "Men of Short Height" are viewed as significantly less active or more passive than their taller counterparts. All in all, the results of analyses of the factor scores parallels the item-by-item results, yielding a uniformly consistent result. The results of this study clearly indicate that stereotyping, social discrimination, and attribution of personality characteristics based exclusively on the factor of height does in fact exist.

DISCUSSION

The results of this study strongly indicate that college-age, Caucasian females possess strong and consistently negative attitudes about men of short height. While previous research on height and its relationship to dating and marital choice has suggested that stereotyping and social discrimination does exist, rarely has this finding been seen as clearly as in this study.

This kind of stereotyping and social discrimination has at least two important implications for the short male. First, it may have profound implications for his development of a positive male identity or self-concept, and second, it means that he must negotiate discriminatory attitudes throughout his life.

Regarding the first point, if one accepts the viewpoint that one's genetically determined attributes interact with social-learning variables in subtle ways (Bandura, 1963, 1967), it becomes clear why short stature has important implications for one's personality development. In this society, tall stature and mesomorphic build in males brings esteem and facilitates the acquisition of rewarding resources. Over time, this will profoundly influence an individual's social-learning history. Boys who are of short stature will most likely be relatively unsuccessful in obtaining positive reinforcement from their peers leading to a "flight from the body world" (Fisher, 1973) or a movement toward more intellectual pursuits.

Another response to short stature is the "Mascot adaptational" response (Finch, 1978) in which the Short male gains acceptance of peers by being a mascot rather than an equal member of the group. A recent review of the literature on short stature in males (Martel, 1984) revealed that the impact of short stature is profound and long lasting. The short male's "failure" to meet the cultural ideal in terms of appearance translates into less social power, lower perceptual impact or "presence" among other people, and lower desirability as a heterosexual partner.

In essence, the views that females hold toward the short male may have a very significant impact on his development of masculine worth. This is reflected by his limited choices in the dating and marriage arena.

As the short male approaches adolescence, he realizes that he is not as desirable a dating partner (Graziano, 1978). The short boy may intuitively know, and his peers frequently emphasize the social reality that,

Personality and all other things being equal, most girls probably prefer tall and handsome boys to those who are short and handsome.

(Dyer, 1968, p. 366)

The universally acknowledge cardinal rule of dating and mate selection is that the male will be taller than the female partner. This "rule" still remains almost inviolatable (Keyes, 1980; Gillis, 1980; Berscheid and Walster, 1974; Berscheid, 1972).

All in all, the results of this research clearly suggest that the short male exists within a social milieu that holds rather negatively valanced attitudes towards him. The results support the hypothesis that people do make assumptions regarding one's personality and behavior based on this salient physical characteristic. Although the complexities of the phenomenon are not fully understood, it is a phenomenon that clearly exists.

Table 61(continued)

ITEM	Source	SS	df	MS	F	P
#9	Rated Ht.	140.66	2	95.33	68.38	***
	Error	504.67	362	1.39		
#10	Rated Ht.	90.89	2	45.44	30.94	***
	Error	531.77	362	1.46		
#11	Rated Ht.	257.45	2	128.73	83.43	***
	Error	558.55	362	1.54		
#12	Rated Ht.	1.60	2	.801	.89	N.S.
	Error	321.06	358	.897		
#13	Rated Ht.	473.30	2	236.65	120.65	***
	Error	710.033	362	1.96		
#14	Rated Ht.	284.65	2	142.33	87.34	***
	Error	586.67	360	1.63		
#15	Rated Ht.	314.42	2	157.21	92.55	***
	Error	614.91	362	1.69		
#16	Rated Ht.	73.55	2	36.77	26.42	***
	Error	501.11	360	1.39		
#17	Rated Ht.	582.09	2	291.04	155.57	***
	Error	677.24	362	1.87		

Table 62

Tukey (HSD) Followup Tests for Semantic Differential

ITEM #1	<u>Rated Ht. (RH)</u>			
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
	3.07	3.12	4.08	Short > Tall & Avg.
		.05	1.01 *	
			.96 *	
	<hr/>			
	*P < .05	C.V.=.340		

ITEM #2	<u>RH</u>			
	<u>Short</u>	<u>Tall</u>	<u>Avg.</u>	
	3.38	4.48	4.59	Short < Tall & Avg.
		1.10	1.21 *	
			.11	
	<hr/>			
	*P < .05	C.V.=.384		

ITEM #4	<u>RH</u>			
	Tall	Avg.	Short	
	2.58	2.83	4.40	Short > Tall & Avg.
		.25	1.82 *	
			1.57	
	<hr/>			
	*P < .05	C.V.=.307		

ITEM #5	<u>RH</u>			
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
	2.67	2.85	5.15	Short > Tall & Avg.
		.18	2.48 *	
			2.30 *	
	<hr/>			
	*P < .05	C.V.=.333		

ITEM #6	<u>RH</u>			
	<u>Short</u>	<u>Avg.</u>	<u>Tall</u>	
	4.01	4.07	4.92	Tall > Short & Avg.
		.06	.91 *	
			.85 *	
	<hr/>			
	*P < .05	C.V. = .403		

Table 2 (continued)

ITEM #7	<u>RH</u>			
	<u>Short</u>	<u>Avg.</u>	<u>Tall</u>	
	4.44	5.35	5.52	Short < Avg. & Tall
		.91 *	1.08 *	
			.17	
	<hr/>			
	*P < .05	C.V.=.289		

ITEM #8	<u>RH</u>			
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
	2.73	2.87	3.80	Short > Tall & Avg.
		.14	1.07 *	
			.93 *	
	<hr/>			
	*P < .05	C.V.=.329		

ITEM #9	<u>RH</u>			
	<u>Short</u>	<u>Avg.</u>	<u>Tall</u>	
	3.98	5.07	5.35	Short < Avg. & Tall
		1.09 *	1.37 *	
			.28	
	<hr/>			
	*P < .05	C.V.=.294		

ITEM #10	<u>RH</u>			
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
	2.90	2.92	3.77	Short > Tall & Avg.
		.02	.87 *	
			.85 *	
	<hr/>			
	*P < .05	C.V.=.302		

ITEM #11	<u>RH</u>			
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
	2.81	2.96	4.34	Short > Tall & Avg.
		.15	1.53 *	
			1.38 *	
	<hr/>			
	*P < .05	C.V.=.310		

Table 62 (continued)

ITEM #13

	<u>RH</u>		
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>
	2.45	3.26	4.70
		.81 *	2.25 *
			1.44 *
<hr/>			
	*P < .05	C.V.=.349	

ITEM #14

	<u>RH</u>		
	<u>Avg.</u>	<u>Tall</u>	<u>Short</u>
	2.58	2.58	4.12
			1.54 *
			1.54 *
<hr/>			
	*P < .05	C.V.=.319	

ITEM #15

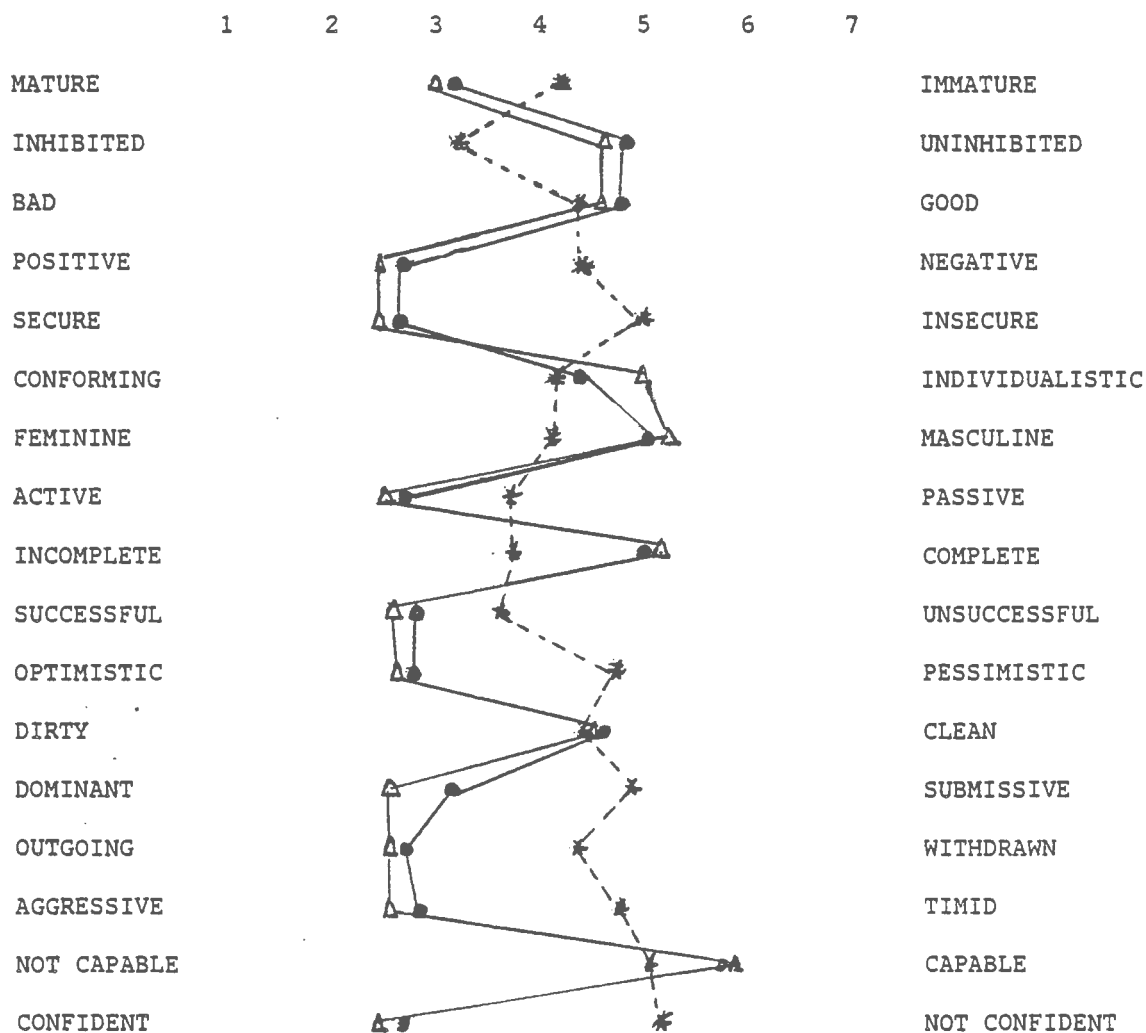
	<u>RH</u>		
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>
	2.59	2.96	4.35
		.37 *	1.76 *
			1.39 *
<hr/>			
	*P < .05	C.V.=.325	

ITEM #16

	<u>RH</u>		
	<u>Short</u>	<u>Avg.</u>	<u>Tall</u>
	4.70	5.34	5.56
		.64 *	.86 *
			.22
<hr/>			
	*P < .05	C.V.=.295	

ITEM #17

	<u>RH</u>		
	<u>Tall</u>	<u>Avg.</u>	<u>Short</u>
	2.42	2.81	4.78
		.39 *	2.36 *
			1.97 *
<hr/>			
	*P < .05	C.V.=.341	

KEY:

"X MEN OF AVERAGE HEIGHT"

"★ MEN OF SHORT HEIGHT"

"X MEN OF TALL HEIGHT"

Figure 13

FEMALE RESPONSE PATTERN FOR INDIVIDUAL ITEMS ON SEMANTIC DIFFERENTIALS
(N=120)

TABLE 63

MEANS, STANDARD DEVEIATIONS, AND TUKEY FOLLOW-UP TEST RESULTS
FOR SEMMANTIC-DIFFERENTIAL DATA

(N= 100)

Men of

Item	M	S.D.	M	S.D.	M	S.D.
MATURE / IMMATURE	3.12	1.09	4.08	1.58	3.06	1.53
INHIBITED / UNINHIBITED	4.59	1.27	3.37	1.49	4.48	1.75
BAD / GOOD	4.83	1.10	4.61	1.28	4.78	1.24
POSITIVE / NEGATIVE	2.83	1.19	4.39	1.48	2.58	1.24
SECURE / INSECURE	2.85	1.31	5.15	1.41	2.66	1.47
CONFORMING / INDIVIDUALISTIC	4.06	1.51	4.00	1.74	4.92	1.60
FEMININE / MASCULINE	5.36	1.27	4.44	1.35	5.52	1.44
ACTIVE / PASSIVE	2.87	1.36	3.70	1.51	2.73	1.53
INCOMPLETE / COMPLETE	5.07	1.30	3.98	1.48	5.34	1.24
SUCCESSFUL / UNSUCCESSFUL	2.92	1.15	3.77	1.28	2.90	1.42

TABLE 63 (Continued)

----- ----- ----- -----				
OPTIMISTIC / PESSIMISTIC	2.96 1.25	4.33 1.45	2.80 1.33	
----- ----- ----- -----				
DIRTY / CLEAN	4.90 1.25	4.77 1.25	4.83 1.29	
----- ----- ----- -----				
DOMINANT / SUBMISSIVE	3.26 1.32	4.70 1.47	2.44 1.41	
----- ----- ----- -----				
OUTGOING / WITHDRAWN	2.58 1.01	4.12 1.55	2.59 1.32	
----- ----- ----- -----				
AGGRESSIVE / TIMID	2.96 1.03	4.35 1.54	2.58 1.37	
----- ----- ----- -----				
NOT CAPABLE / CAPABLE	5.34 1.20	4.70 1.43	5.56 1.14	
----- ----- ----- -----				
CONFIDENT / NOT CONFIDENT	2.00 1.36	4.78 1.49	2.42 1.37	
----- ----- ----- -----				

Table 64

ANOVA for Factor Score: Evaluation

Source	SS	df	MS	F	P
Rated Ht.	97.70	2	48.85	96.33	0.0
Error	178.49	352	.507		

Table 65

Tukey (HSD) Followup Test for Main Effect of Rated Height: Evaluation Factor

<u>Rated Height</u>			
<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
2.85	2.95	3.80	Short > Tall > Avg.
	.10	.95	Tall & Avg. not sig-
		.85	nificantly different
*p < .05 C.V. = .180			

Table 66

ANOVA for Factor Score: Potency

Source	SS	df	MS	F	P
Rated Ht.	280.19	2	140.09	140.26	0.0
Error	359.58	360	0.99		

Table 67

Tukey (HSD) Followup Test for Main Effect of Rated Height: Potency Factor

<u>Rated Height</u>			
<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
2.50	2.95	4.20	Short > Avg. > Tall
	.45 *	1.70 *	
		1.25 *	
<hr/>			
*P < .05	C.V. = .250		

Table 68

ANOVA for Factor Score: Activity

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Rated Ht.	137.85	2	68.929	59.01	0.0
Error	408.80	350	1.168		

Table 69

Tukey (HSD) Followup Test for Main Effect of Rated Height: Activity Factor

<u>Rated Height</u>			
<u>Tall</u>	<u>Avg.</u>	<u>Short</u>	
3.12	3.14	4.21	Short > Tall > Avg.
	.02	1.09 *	Tall & Avg. not sig-
		1.07 *	nificantly different
<hr/>			
*P < .05	C.V. = .274		

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APPENDIX L

EXCERPTS FROM INTERVIEW STUDY

Did you experience any problems because of it? I'm thinking of Elementary School years.

"Ya, in terms of, there was always the typical picking of teams, and I was always one of kind of the smaller people who were just the last to be picked, and, in general, people not realizing that you are as old as you are."

Why is it a problem if people would pick you last?

"Just that for no other reason than you were shorter. It was as though you were just inherently worse than everyone for no fault of your own, and people who were your friends regularly, in certain things like that said, 'Well, we don't want you'."

Do you think that there is any relationship between the fact that you are shorter than average and brighter than average?

"I don't know if there is any inherent relationship to start with. Maybe because, if you're shorter, you tend toward some sort of social isolation. You tend to study more in your early years."

Do you feel that you have been abused or mistreated in any way because of your height?

"Oh, ya, especially in elementary school. They said, 'There's the fat kid, or the short kid'."

Did you have a nickname?

"Just the general 'shortie'."

"In terms of what bosses do, it seems that my perception of people is that, if they need to hire someone to be in charge of other people, they are more likely to hire someone who is the tall, domineering type person."

How would life be different for you if you were 5' 10"?

"In general relations with people, there would be one less obstacle, one less barrier you would have to overcome, or one less touchy subject to deal with in terms of meeting people."

Excerpts from Interview Study (continued)

Would you say that you come from a happy family, a well-adjusted family?

"Oh, sure. My parents instilled a sense of self-esteem in what I was doing. It wasn't a sticky point that I wasn't playing basketball, because I was good at other things. I was particularly involved in leadership in my high school. Some people joked about that - Napoleon complex."

What do you think about people saying something like that?

"Smaller people HAVE to sort of fight their way through the crowd to be noticed. In some cases they have to be more defensive or more aggressive as the circumstances warrant. They tend to be the smarter people in the class, or people who are doers."

When was the first time that you became aware that you were not going to grow anymore?

"When I was about 12, they sent me to Boston Children's Hospital, 9th grade, to find out why. I went through all those painful tests for them to tell me that it was hereditary. It was very painful."

"I was angry that I had to do through all of those tests. But, I remember that I had feelings that my brother was bigger and stronger than I was. In terms of sibling rivalry, fights and things like that, he had power over me. I resented that."

First awareness. How did it feel?

"Sixth grade. The first girl that I liked was 5' 10". In gym, I was always the shortest. It didn't feel good.

I remember feeling inferior. I remember thinking that if I got into any fights, 'cause I was in a rough school, I would lose, 'cause most everybody was bigger than me. So I would really never get involved in fights.

How did your not being as big as the other boys have an impact on your style or your relationships with them?

"Oh, I was more verbal. I compensated verbally. I compensated in that way 'cause I was not really active in sports. They usually picked the bigger people on teams and that sort of thing, so I compensated verbally. I was very verbal and very hyper. So, in those ways, I think that's how I got my attention."

Excerpts from Interview Study (continued)

Do people call you
cute frequently?

"Yes. They still do, and it makes me
angry."

In terms of
competition.....

"I felt that I couldn't compete. I always
felt - don't even try out for sports. There
is no sense in even doing it.

How did you feel in
gym class?

"I always felt badly. I felt uncomfortable
when they picked teams. I was always picked
last."

Do you recall any
feelings about that?

"Feeling inferior. See, I think that I have
more feelings about it now that I'm older
than when I was younger. Maybe I'm more
aware of it.

"Well, it was a very negative thing, going
to Boston Children's Hospital. It was pain-
ful physically."

How did your parents
handle this at the
time?

"They sent me to a psychologist. They say
that teachers saw me as immature. Ya, I
think my size and my maturity are linked
there somehow."

Did you feel in high
school that you were
discounted because
of your size?

"After a while, with my experience of being
in elementary school and going through a
hell of a thing in Boston, you really buy
into it. You buy into it that you are less -
things aren't as expected of you as much."

What do you think
the implications of
"cute" have been for
you?

"Even though I know headwise that people say
it in terms of a positive warm regard, I
still view "cute" as being less than hand-
some or attractive. I just view it really
negatively. I think it's a putdown."

What kind of sense
of humor do you have?

"I think my humor is very quick, very
sightful, and it can be very sarcastic.

Excerpts from Interview Study (continued)

Then you went to college. How did you adapt?

I became very academically competitive. In class I was very verbal. I think when you are short, sometimes you don't get noticed. I think that is partly the reason for my verbosity."

How would life be different if you were taller?

"People would view me as more competent. I believe I would feel better about myself."

Development:
4th-6th Grade:
Little League.

"I was the shortest on the team. I was discriminated against. I got the poorest positions."

Did height bother you?

"When you are in a crowd, at a concert, and everybody stands up and you have to stand on a chair, it's embarrassing."

"A thought crosses my mind that I'm standing next to someone who is $1\frac{1}{2}$ feet taller than me. I'm wondering what he thinks about me being this tall, and I feel like maybe there is an onus on me to prove that I am at least as intellectually worthy as a person."

Humor:

"I kind of use humor like Judo or Akido. If someone is making fun of me because of my height, I'll take it a step further than they did."

College: Is your experience of living or being different from others of average height?

"The combination of being a student and being short made me feel like, well, when I was in a supervisory relationship, it made me feel like a kid."

"For me, the barrier is more in my own mind, that I felt younger 'cause I was smaller. When you are a head shorter than somebody, it is analogous to a child looking up at an adult. So I think, if anything, I still have to deal with the feeling of being littler. When I think of little, I think of younger."

Excerpts from Interview Study (continued)

Discrimination?

"last year when going for interviews, this guy had this couch that was about a foot too deep, and I felt that I either had to sit on the end or sit forward. I felt very small - like Alice in Wonderland or Tom thumb. I walked out of there feeling very intimidated."

Being male.

"There's a value for men to be big, strong, and instrumental. If you get into that crap, you're going to be very affected by your height."

"Obviously there is some social reinforcement in wanting to be tall. Tall people do seem to be more attractive in some ways. There is a psychological stigma associated with being short, and that has to do with people feeling that small is inadequate."

The management of aggressive impulses.

"My height protects me in some ways from physical aggression. It give me some license to say things that I really feel without giving people a license to hit me."

How do you handle feelings of anger and aggression?

"Sarcasm."

Has it always been that way?

"Ya. That's been the main mode."

What kind of judgments do you think other people make about you based more or less exclusively on height?

"They are probably looking to see what I'm going to do to compensate for what I think my faults are in being short."

Why would you think that one has to compensate for this?

"Because there is somewhat lacking, and physically it's height, and that has to be compensated for."

Excerpts from Interview Study (continued)

- Do you compensate for it? "Maybe I do. I make a conscious effort not to stand very close to other people. I make sure that I'm standing perfectly straight."
- Why do you think that that's important? "Because from the beginning you want to present as standard a view of yourself as possible."
- What do you mean "standard?" "You want to be as middle of the road in everything until you get to see what this person that you're confronting likes and dislikes."
- "If I'm meeting someone who is short and I get the impression that he's comfortable, then I'm automatically comfortable. If he's shorter than I am, I won't make every effort to stand perfectly straight."
- "If I'm meeting someone who is very tall and who is comfortable, then I'll be comfortable. If he's slouching, I'll probably still stand up straight."
- How did the family handle the fact that you were not going to grow up to be a strapping jock? "Mom was considering some sort of growth hormone drug. The version of the story that I remember was Dad talked her out of it."
- Did you talk about it? "We talked about it. Mom's thought was that I would just have social problems, and she was anxious about that. She was constantly anxious about things that I had that would cause me social problems."
- Does the use of humor play an important part in your life? "Most definitely. I use both extremes. I use it to tell people to get off my case, and I also use it with people who I like very much and I'm comfortable with."

APPENDIX M

Wilk's lamda may be converted to an F ratio by conversion to Rao's R statistic, since Rao's R is distributed approximately as an F distribution. The formula for Rao's R is:

$$R = \frac{1 - \frac{\Delta}{1/s}}{\Delta} \left(\frac{ms - \frac{pv_h}{2} + 1}{pv_h} \right)$$

where R = Rao's R

p = number of dependent variables

v_h = degrees of freedom for effect being tested (= k-1 where k = # of levels of effect).

$$m = v_h + v_e - (p + v_h + 1)/2$$

v_e = degrees of freedom for error for effect being tested (= n - k)

$$s = \sqrt{\frac{(pv_h)^2}{p^2 + v_h^2} - 5}$$

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